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#### ABSTRACT

This evaluation attempts to measure the extent and effectiveness of ESEA Title I programs designed to meet the needs of disadvantaged children and apprizes the public and the legislature of program outcomes. In keeping with USOE requirements for evaluating Title I programs, this document is constructed of (1) responses to USOE probes by questionnaire sequence, (2) applicable supplementary or background information, and (3) available related findings. Data were collected from interviews with selected personnel from the Hawaii State Department of Education; reaction reports from teachers, administrators, State ESEA Title I personnel, and university personnel; onsite visitations by Title I staff and university consultants; and evaluation supplement and narrative reports distributed to local educational agency Title I directors and activity directors. (Pages 33-55 may reproduce poorly.) (EA)



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STATE SUMMARY OF TITLE I, ESEA

FOR

FISCAL YEAR 1970

STATE ANNUAL EVALUATION REPORT

FOR

FISCAL YEAR ENDING JUNE 30, 1970

0E-4320

STATE OF HAWAII

DEPARTMENT OF EDUCATION

HONOLULU, HAWAII 96804

November, 1970



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#### BACKGROUND AND BASIC STATISTICS

The Department of Education of the State of Hawaii has a role which is unique in the nation. It is a state educational agency as well as the local educational agency. Being a single school system with one board of education, the Department provides direct administrative, supervisory, fiscal and supportive services to the schools. It also certifies, processes and assigns all personnel employed by the system.

For administrative purposes, the school system is divided into seven districts located in the four counties of the State. The Island of Oahu, which comprises the City and County of Honolulu, has four districts (Honolulu, Central, Leeward and Windward). The remaining three districts are located in the other three island counties of Hawaii, Maui and Kauai. Two of the districts include more than one island. Maui District, includes the islands of Maui, Molokai and Lanai, while Kauai District includes the islands of Kauai and Niihau.

Within the limitations imposed by the Hawaii State school system, the seven administrative districts have been regarded as local educational agencies for Title I purposes. All of these seven administrative districts meet the requirements to receive Title I funds; therefore, the State Title I grant for FY 1970 was allocated to the districts in accordance with the Title I regulations. (See Table 1).

In the 1969-70 school year there were 215 public schools in the State of Hawaii with a total enrollment of 178,564 students (K through 12, special and regular schools). A total of 32,651 students were enrolled in the 112 private schools operating in the State.

There were a total of sixty-three (63) approved projects (see Appendix B for summaries) that were implemented during FY 1970 in 81 schools. (See Table 2). Twenty-nine (29) projects were operated during the regular school term and thirty-four (34) during the summer. All seven districts operated the approved projects in both the regular and summer terms.

Among the students who participated in the projects a total of 7,602 were enrolled in the public schools and a total of 272 in non-public schools. Of the participating students from public schools, 39 were handicapped. An examination of the annual total of participants since 1966 show a decrease each year. (See Table 3).

#### II. STAFF VISITS TO LEA'S

During FY 1970, one administrator and five Title I connected specialists made a total of 150 staff visits to the LEA's. The objectives and effects, and the numbers and proportions of the visits are given in Table 4.



-1-

TABLE 1

TITLE I, ESEA

FISCAL YEAR 1970

COUNTY GRANT, AND DI. FRICT ALLOCATIONS

STATE GRANT: \$2,606,146

#### COUNTY GRANTS

COUNTY	NO	. OF CHILDREN	AMOUNT	PER CENT
Honolulu		12,675	\$2,004,301	76.91
Hawaii		2,256	356,742	13.69
Maui		944	149,275	5.72
Kauai		606	95,828	3.68
	TOTAL:	16,481	\$2,606,146	100.00

#### DISTRICT ALLOCATIONS

DISTRICT		AMOUNT	PER CENT
Honolulu		\$1,252,889	48.1
Central Oahu		197,425	7.6
Leeward Oahu		276,994	10.6
Windward Oahu		276,994	10.6
Hawaii		356,742	13.7
Maui		149,275	5.7
Kauai		95,827	3.7
·	TOTAL:	\$2,606,146	100.0



TABLE 2

## TITLE I, ESEA FISCAL YEAR 1970

#### PARTICIPATING SCHOOLS

DISTRICT	ELE	MENTARY	INTERMEDIATE	HIGH	TOTAL
Honolulu		15	5	3	23
Central		5	1	2	8
Leeward		4	1	2	7
Windward		6	2 ·	2	10
Hawaii		9	. 3	3	15
Maui		9	1	2	12
Kauai		5		_1_	6_
	TOTAL:	53	13	15	81



TABLE 3

TITLE I, ESEA

NO. OF PROJECTS AND PARTICIPANTS THROUGH THE YEARS

FISCAL YEAR	NO. OF PARTICIPANTS	NO. OF PROJECTS
1966	74,141	. 94
1967	17,298	116
1968	10,337	123
1969	8,891	49
1970	7,874	63



TABLE 4

		No. of	
OBJECTIVES	EFFECTS	Visits	Proportion
PLANNING (guidelines; school eligibility; orientation-information)	Modification of guidelines Affirmation of guidelines	7	5%
PROGRAM DEVELOPMENT (specific proposal negotiation; operational review; workshops for districts)	Proposal modifications and improvements	32	21%
PROJECT MONITORING-PROJECT OPERATION (district and school level)	Project modifications and improvements	109	73%
PROGRAM EVALUATION (design; methods; implementation; results; trends)	Modifications in evalua- tion designing and implementation	2	1%
,	TOTAL	150	100%

#### III. NEW PROCEDURES

The 1969-70 school year was a period in which the existing State Title I procedures were reviewed and revised. Promising new procedures were explored to assist in attaining the goal of improving the projects that were being implemented in the schools and districts of the State.

One of the first activities attempted was the revision of the existing State Title I guidelines. The objectives were to:

- A. Clarify the Title I regulations for the designers and implementors of the projects.
- B. Provide effective procedures in developing, implementing and evaluating the projects.
- C. Strengthen the State Title I Program.
- D. Reflect the latest national guidelines.



Another was the vigorous enforcement of the State and Federal program requirements. One method was the series of project visitations made to monitor projects and to gather data for use in the preparation of the State evaluation report. The visitations also provided opportunities to furnish technical assistance to the district personnel in modifying the projects to better meet the needs of the participating children.

A second method used in this enforcement of program requirements was the initiation of procedures for thorough review of all Title I project applications submitted. Several problems arose in the course of initiating this method because of misunderstandings, but most of them were resolved in the negotiations that were conducted in an atmosphere of mutual learning and of sharing information to modify the project proposals into approvable forms.

A third activity attempted, which was to facilitate the dissemination of information regarding the program requirements, project designs and other instructions regarding the Title I program, was the series of conferences held for the district coordinators. These conferences were designed mainly to provide the coordinators with assistance in developing more effective projects. In one of these conferences, Mr. Paul Miller of Area Desk Five, U.S. Office of Education, met with the district coordinators to clarify certain technical problems relating to the Title I program.

During the school year a continuous effort was made to develop effective evaluative procedures that would:

- A. Apply to the majority of the projects.
- B. Provide information that was pertinent and useful to the project personnel, the district personnel, the department and the U. S. Office of Education.
- C. Enable all project personnel to implement them.

This effort will be continued until the desired procedures can be found or developed.

To complement this exploration of evaluative procedures, a number of discussions were held among the state agency and district personnel staffs to develop more effective evaluation procedures. These discussions culminated in the workshop held in May, 1970 in which the district personnel were shown some techniques in designing, implementing and evaluating their projects more effectively.

A special effort was made to involve representatives from the eligible non-public schools in all of the conferences and workshops as well as the discussions that were conducted. The district coordinators were reminded of the program requirement to include in the proposed projects the educationally deprived children in the non-public schools residing in the eligible attendance areas.



#### IVA. EDUCATIONAL ACHIEVEMENT

#### 1. READING ACHIEVEMENT

The achievement in reading and language arts for project participants has been measured by nationally standardized tests. A number of different tests were used by the projects, resulting in information which is a statewide compilation rather than a comprehensive statistical analysis. For this reason, interpretations are of a very general nature.

The following tests were used in making comparisons of reading and language achievement:

Gates-MacGinitie Reading Test, forms B, C, D and E, comprehension subtest

Stanford Achievement Test, reading subtest, and spelling and language subtest

Durrell-Sullivan Reading Capacity and Achievement Tests

California Reading Test

Gray Oral Reading Test

Wide Range Achievement Test, reading subtest

Monroe Reading Aptitude Test, language subtest

Botel Reading Inventory

Complete data is available for 2,759 students who were tested for reading and language arts achievement on a pre-post basis during the 1969-70 school year. About half of these students took the Wide Range Achievement Test. Approximately 40% used the Gates-MacGinitie series. The remainder of tests noted above were used for the other students.

Student progress was considered to have occurred in three general categories. The first included those students whose academic achievement met or exceeded the objectives. Two criteria were considered, progress ratios and t-tests on pre-post means.

The first criterion was that of the ratio between months tested progress and the pre-post test interval. All class ratios of 1.0 or greater were considered evidence of meeting or exceeding the general objective of reading achievement at an average or better rate. Where grade equivalent levels were not employed (Honolulu District), t-test significance at the .10 level or better was used as evidence of satisfactory student progress in meeting or exceeding objectives.

The second student progress category included students who made some tested forward progress noted by a higher post than pre-test raw score. This category is also reflected in positive progress ratios under 1.0 and in positive t-test values not reaching significance at the .10 level.

The third student progress cateogry included those who made no tested progress or whose post-test scores were lower than pre-test scores. These are also reflected in negative progress ratios and negative t-test values whether or not significant.



Tables 5 and 6 indicate student progress by grade level and by administrative district. Over the entire state complete pre-post data was available for 2,759 project participants during the regular school year. Of these 2,759 participants in both public and private schools, 1,170 or 42.2% had progress in reading and language arts which met or exceeded project objectives. Another 970 students or 35.2% made some progress yet did not meet objectives. Thus a total of 2,140 students or 77.6% made academic progress during the year. Many others, however, (619 or 22.4%) had either no forward progress or regressed somewhat.

Examination of the tested reading and language arts achievement by the seven districts in Hawaii reveals some differences. While by the state average 42:4% of students reached or exceeded objectives, district percentages based on class means ranged from 0% in Windward District to 49.5% in Honolulu District. Those who made some progress ranged from 4.0% in Kauai District to 63.5% in Windward District, while the state average was 35.2%. And those students who made no progress ranged from 14.2% in Honolulu District to 51.5% in Kauai District, the state average being 22.4%.

Student progress by grade level groupings was also calculated. General trends are few, but it appears that almost all of the children in kindergarten and first grades (95.5%) met or exceeded the objectives, while those in grades 10-12 seldom did (13.8%). The middle grades of 4-6 and 7-9 had the largest number of students who made no progress, with about one-third of the project participants from these grades remaining stationary or dropping behind in tested reading and language skills. Thus only two-thirds of Title I classes of grades 4-9 children made some reading progress.

#### 2. SCHOOL ATTITUDE

The State, in conjunction with a contracted agency, has begun to develop a School Attitude Inventory for grades 4-12. This instrument was administered to several thousand Title I participants on a pre-post basis during the 1969-70 year. Conclusions were that the instrument needs some rephrasing and statewide standardization but can be useful to Title I projects in the future. This task requires further investigation and may be carried out in the 1970-71 year if feasible.

General trends noted in the pilot phase were that students' favorable attitudes toward school declined both from pre to post testing and with increasing age. This conclusion is compatible with staff opinions. Students (and it is suspected staff, too) like school more in the fall than in May; and younger children like school more than older ones, as evidenced by campus disruptions and dropout incidences, both of which increase with age.

A copy of the pilot form of the instrument is included in the appendix. (See Appendix A).

#### 3. EVALUATION RESPONSIBILITIES

Several general difficulties have been noted, and various remedies chosen. The major difficulty appeared not to be that of project adequacy but of evaluation adequacy. From the start of Title I through 1969-70, the State coordinated a testing program for project participants, with test

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Table 5

ESEA Title I

1969-70

Achievement on Reading/Language Tests (By Level)

	LEVEL		No Progress  Negative and Zero Ratios or Post mean-Pre mean Negative	Some Progress  Positive Ratios Under 1.0 or Post mean-Pre mean positive	Progress Meets or Exceeds Objectives  Ratios 1.0 and Over or Positive t-Test at .10	TOTAL
	Grades K - 1	N	18	0	402	420
	•	%	4.5%	0%	95.5%	100%
	Grades 2 - 3	N	156	475	332	807
		%	19.3%	39.5%	41.2%	100%
	Grades 4 - 6	N.	257	326	214	797
		%	32.2%	40.9%	26.9%	100%
	Grades 7 - 9	N	158	105	207	470
		%	33.6%	22.3%	44.1%	100%
	Grades 10 - 12	N	30	64	15	109
		%	27.5%	58.7%	13.8%	100%
-						
		N	619	970	1170	2759
	TOTAL	%	22.4%	35.2%	42.4%	100%

Table 6

#### ESEA Title 1 1969-70 Achievement on Reading/Language Tests By District

DISTRICT		No Progress  Negative and Zero Ratios or Post mean-Pre mean Negative	Some grass  Positive Ratios Under 1.0 or Post mean-Pre mean positive	Progress Meets or Exceeds Objectives Ratios 1.0 and Over or Positive t-Test at .10	TOTAL
Central	N	79	57	47	183
	7,	43.2%	31.1%	25.7%	100%
Leeward	N	47	61	25	133
	%	35.3%	45.9%	18.8%	100%
Windward	N	42	73	0	115
	%	36.5%	63.5%	0%	100%
Hawaii	N	136	131	207	474
	%	28.7%	27.6%	43.7%	100%
Maui	N	34	60	48	142
	%	23.9%	42.3%	33.8%	100%
Kauai	N	52	4	45	101
	%	51.5%	4.0%	44.6%	100%
Honolulu	N	229	584	798	1611
	%	14.2%	36.3%	49.5%	100¾
TOTAL	N	619	970	1170	2759
	%	22.4%	35.2%	42.4%	100%

scoring and interpretation contracted with another agency. Rather than realizing great benefits from this endeavor, it seemed that project level personnel were unable to feel involved in the evaluation and often did not pursue other evaluation procedures to supplement the standardized tests.

In addition, the test chosen did not meet with the wholehearted approval of all project personnel whose objectives and students were occasionally not measured adequately. Therefore, the major project evaluation design and implementation responsibilities will be at the district level in 1970-71. The State will continue to provide assistance where requested and may continue to develop the School Attitude Inventory under contract with an outside agency.

#### IVB. CHARACTERISTICS OF EFFECTIVE PROJECTS

(See Appendix C).

#### IVC. COST-EFFECTIVENESS RELATIONSHIP

In comparing cost to effectiveness, Title I projects with language-reading objectives measured by standardized tests were compared with Title I per pupil expenditures for those projects. An achievement ratio was employed whereby months tested achievement in language and reading (weighed school means) was divided by months in test interval. All resulting school-wide achievement ratios were ranked. Per-pupil expenditures were also ranked, and ranged from \$150 to \$1,077. A total of 53 schools were included in the cost-effectiveness analysis. A rank order correlation coefficient was calculated  $(r = 1 - \frac{6 (£ di^2)}{N(N^2 - 1)})$  and found to be +.14.

Thus we have concluded that there is little association between these two factors, and that factors other than cost must contribute more strongly to student achievement.

#### V. EFFECTS ON ADMINISTRATIVE STRUCTURE AND EDUCATIONAL PRACTICES

The efforts of the State and district office personnel have been focused on the goal of developing procedures for the effective coordination of all of the compensatory education programs directed at the deprived children. Among the several activities that were attempted, the first was a review of the program requirements of current projects. It is essential that the restrictions of each program are understood in the attempt to develop procedures for overall program coordination.

Besides this review, another activity attempted was a series of discussions and planning sessions. Representatives from the offices of the state agency, district offices, resident groups of the target areas, community action groups, non-public schools, private agencies and other groups interested in compensatory education were invited to participate. The views, reactions and suggestions derived from these meetings have indicated the value for



continuing such exchanges. For the future, it is planned to include student participants in these meetings.

Title I, because it funds a majority of the compensatory education projects in the State, has an important part in the overall coordination plans. As the intent of the program, which is to supplement the regular school services for the educationally deprived, becomes better understood, more of the schools will begin to modify their regular school programs. Formal orientation for school personnel and community residents was initiated during the 1969-70 school year, and plans have been made to expand this in future years.



#### VIA. COOPERATIVE FUNDING

#### 1. STATE GENERAL FUND

Two districts (Hawaii and Maui) in the State had one cooperative project each, using Title I and State funds. In each case, the project was about one-half state funded from State general funds rather than special categorical funds for compensatory education. The project summaries are included below.

#### MAUI DISTRICT PROJECT\_

School: MAUI HIGH

Project Description: This project is designed to provide a modified

English-Social Studies Program for the educationally disadvantaged secondary students. The English and Social Studies Program are modified into a core program to coordinate the language arts instruction with social studies. The needs of the students are assessed on an individual basis; individual assessment enables teachers to do individualized corrective

and developmental teaching.

Title I Input: Amount approved - \$8,797.00

Personnel - 1 secondary teacher (tull-time)

State Input: Amount approved - \$9,350.00

Personnel - 1 secondary teacher (tull-time)

No. of students to be served - 117

#### HAWAII DISTRICT PROJECT

Schools: 11 ELEMENTARY AND INTERMEDIATE SCHOOLS IN HILO

Project Description:

- a. Objectives of Project
  - (1) To provide diagnostic services to students referred by classroom teachers.
  - (2) To provide specific advice and materials to classroom teachers regarding the treatment of cases that are returned to them.
  - (3) To provide treatment for especially difficult cases.
  - (4) To provide year-round in-service experiences to classroom teachers who are found to have significant numbers of students with reading difficulties.



#### b. Services

Schools selected participating students from teacher referrals. The reterred youngster was transported to the clinic and given a series of tests to determine the nature and severity of his reading retardation. The reading clinic staff selected the educationally deprived students on the basis of growth potentiality. The reading clinic scheduled six 45-minute periods daily, except Wednesdays, for remediation instruction.

In-service training for the clinician teachers included techniques of reading diagnosis, prescription for specific reading disabilities, and the rationale in the use of materials and equipment such as the controlled reader, Tach-X, and the language master.

In summarizing the overall gains, the average gain was 2.8 months of progress in reading for each month at the reading clinic. If an expected gain of one month is accepted as normal, this would be a gain of 1.8 months above expectancy for each month in attendance. On the other hand, learners with the kinds of deficiencies treated at the clinic very seldom achieve at the 1.0 per month rate. It would appear, therefore, that the overall average gain of 2.8 per month is even more significant.

Title I Input:

Amount approved - \$24,272.00

Personnel - 1 director

l educational assistant

State Input:

Amount approved - approximately \$30,000.00

Personnel - 3 clinician teachers No. of students to be served - 105

#### 2. STATE CATEGORICAL FUNDS

State categorical funds provide four types of programs specifically for the educationally disadvantaged. These are described briefly in the accompanying pages. These programs are operated by the Compensatory Education Section, as is Title I. A summary of funding and beneficiaries of all State and federally funded programs operated by this office (See Table 7) and program descriptions of other compensatory programs are included.



TABLE 7

# SUMMARY OF FUNDING AND BENEFICIARIES

Project				Funding			1969-70	1969-70 Estimates
	1965-66	1966-67	1967–68	1968-69	1969-70	Total	- Benefi-	Target
Special Motivation	47,360	47,040	48,310	4,000 <sup>a</sup>	0	146,710	732 <sup>b</sup>	2,817 <sup>c</sup>
Headstart	679,300	551,526	652,924	650,299	320,704	2,854,753	627	1.944
Follow Through	0	0	92,371	168,482	253,379	514,232	200	1,440
N Y C	640,610	368,000	326,408	501,800	411,671	2,248,489	875	2,912
Act IV	235,513	250,708	226,741	271,951	422,034	1,406,947	2,711 <sup>d</sup>	4,166
ESEA Title I	2,374,944	2,108,762	2,226,608	2,048,479	2,606,146	11,364,939	7,874	13,476 <sup>e</sup>
Model Cities	0	0	0	0	783,091	783,0918	3,711	63,900 <sup>f</sup>
Act 299	0	0	0	0	137,000	137,000	2,371	2,371
Dropout	0	0	0	109,110	506,485	615,595	791	4,889
TOTAL	3,977,727 3,326,036	3,326,036	3,573,362	3,754,121	5,440,510	20,071,756	20,192	97,905

Currently State General Fund

Estimate of 61 per class per year, based on McKinley data

Estimate of 8% of grade 10-12 enrollment

Because of overlapping services, projects claim 6808 beneficiaries, of whom 6105 are HHL residents' children Number of children in families receiving public welfare support, 1969 Total population of Model Neighborhood Areas Only \$35,251 actually received, January 1970 B Fredcba

#### ACT 125, SLH 1961, SPECIAL MOTIVIATION PROGRAM

Program Description:

This 1961 enactment established a pilot work-experience program designated the Special Motivation Program in 1965 in an attempt to combat "the dropout problem by providing the unmotivated potential dropout extra supportive help through group and individual guidance, tutoring, modified curricula and modified scheduling. The program attempts to assist the unmotivated potential dropout who has re-entered school.

The responsibility for the administration of this program was first vested in the Special Education Branch, but was recently transferred to the Compensatory Education Section as a component of the Statewide Dropout Program. Responsibility for maintaining and operating the program is assumed by the Districts.

Appropriation for the Special Motivation Program is made by the Hawaii State Legislature.

During the 1969-70 school term, the Districts reported 16 Special Motivation Classes.

#### ACT IV OF 1965

Program Description:

This amendment to the Hawaiian Homes Commission Act of 1920 provides State funds for projects developed for the educational improvement of the children of the residents of Hawaiian Home Lands.

The primary focus of this act is upon the educational improvement of children residing on the Hawaiian Home Lands who are enrolled in the preschool and elementary grades of both public and private schools. Hawaiian Home Lands resident children attending secondary school also receive help under this act.

The overall responsibility for developing and administering the educational projects funded by this act lies with the Department of Education. The act requires consultation with the University of Hawaii and the Department of Hawaiian Home Lands but sets no formal procedure for implementation of projects. A special advisory council has been established to assist the Department in this responsibility.

Act IV authorizes the Department of Education to draw, with prior written approval of the Governor, upon a special account set up within the Hawaiian Home Development (Loan) Fund for educational projects.



#### ACT 299, SLH 1967, PROGRESSIVE NEIGHBORHOODS PROGRAM

Program Description:

The purpose of this Act is "to initiate on an exemplary and demonstration basis remedial action to alleviate conditions contributing to a composite problem area by concerted program to supplement—public resources in such an area and to attempt new solutions through reallocation of present resources."

Part III of this Act concerns the educational needs in disadvantaged areas. The purposes listed under this section are:

- a. To allow for more effective use of education programs in multi-problem neighborhoods and
- b. To provide for exemplary and demonstration school programs in progressive neighborhoods which could serve as models for other neighborhoods and schools.

Act 299 provides for the development originally of Nanakuli-Maili-Waianae-Makaha areas through additional resources from the State.

Responsibility for the administration of this program rests with the chief executive officer of the State. A Task Force which includes the Superintendent of Education assists the Governor.

#### STATEWIDE DROPOUT PROGRAM

Program Description:

The purpose of the program is the minimize the number of dropouts through early identification and preventative services. The program is also intended to provide services to actual dropouts, encouraging return and/or assisting them to continue their educational and occupational preparation through other avenues.

In the fall of 1969, about 800 youths, grades 5-12, received direct services. Another 426 were identitied as potential beneticiaries. A projection of the statewide dropouts and potential dropout numbers in secondary schools showed 5,000 youths to be of direct concern to the program.

Program services in 1969-70 were offered by a staff of 19 detached counselors, 8 outreach aides, and nearly 100 teachers as part-time advisors. Program components are:

The Identification and Reporting System Counseling and Guidance Services Work-Study Cultural-Motivational Activities In-Service Training for Staff Tutorial and Remedial Instruction



The program is guided by one program specialist of the Compensatory Education Branch, Department of Education. The program is offered in each of the seven school districts, with staff serving one or more schools. Concentration is on the intermediate and high school level.

#### VII. NON-PUBLIC SCHOOL PARTICIPATION

A review was made of the amount of participation by students from non-public schools in the Title I projects during the 1969-70 school year. This review was prompted by the complaints received from the parochial school officials that services were not being extended to their deprived students.

Several meetings were held with the non-public school officials to ascertain the background of their complaints and to explore with them ways of increasing services to their students. The non-public school officials were invited to all of the Title I discussion meetings and workshops that were conducted by the State agency. The district personnel were reminded about the requirement that non-public school officials were to be included in the planning and evaluation of the projects.

There has been noted a general reluctance on the part of the public school officials to include non-public school students in programs supported by public tunds. This atmosphere has been fostered in part by the State laws which prohibit use of public funds for private school students and in part by the views of the general community. It will take some time to re-educate the school personnel and the community to the requirements of the Title I program.

There has been an improvement on this matter of participation of deprived students from non-public schools in Title I projects. In the regular school term of 1969-70, there were 132 children from non-public schools participating in only three projects. These projects were approved in August, 1969, prior to the initiation of the review and discussions with non-public school officials. But for the 1970 summer term, a total of 140 students from non-public schools were included in eleven projects. The summer projects in which these non-public school children participated included a variety of academic and outdoor activities.

The district and school Title I personnel will be reminded to extend their efforts to include deprived students attending non-public schools in their projects.

#### VIII. TEACHER-TEACHER AIDE TRAINING

All districts carried out some form of staff training during the year, both in the regular school year and in the summer. In some cases, professionals and paraprofessionals received separate training sessions, but six of seven districts did provide joint training opportunities. These joint sessions were primarily for orientation purposes and were or less than one



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week (full-time equivalency) in duration. (See Table 8) Six districts provided orientation during the regular school year, and four did so during the summer. A total of 433 persons received orientation in the regular term and 169 in the summer. (See Table 9)

One district provided a joint training workshop of greater than one week (full-time equivalency) duration, and this was during the summer.

While all staff training efforts were satisfactory, none of the joint training ventures are felt to be outstanding. Thus, no examples are offered this year. Future improvements are expected.



ERIC	•
Full Text Provided by ERIC	

		PROFESSIONALS ALONE	ONALS A	LONE	P,	PARA-PROFESSIONALS ALONE	SSIONAL	S ALONE		BOTH PROFESSIONALS AND PARA-PROFESSIONALS	BOTH PROFESSIONALS ND PARA-PROFESSION	VAL.S STONALS
	1	Number	ber tra	trained*	, ,	N.	Number tr	trained	:	Nur	Number trained	ined
DISTRICT	rotal Em- ployed	Orient- ation	Work- shop	College	rotal :m- ployed	Orient- ation	Work- shop	College credit	Fotal Em- ployec	Total Em- Orient- ployedation	Work- shop	College
Honolulu	127	10	l	54	10	1	24	1	137	57		1
Leeward	52	ı	25		14		`1	1	99	25	1	ı
Centrai	11	1	7	ı	0		ı	1		ı 	1	ľ
Windward	47		t	93		l	1	ı	78	70	ı	ı
Hawaii	29	I	20	1	11	٣	ı	1	70	l 	75	
Maui	19	14	1	t	7	2	1	ı	23	-2	1	ı
Kauai	0	2	ı	ı	0	' ı	1	ı	0		1	ı
·												
Total	285	26	52	147	05	50	54	0	325	127	42 *	0

\* The training categories used refer to type and duration. Orientations are less than one week, full time equiv-alency. Workshops are of one week or greater duration. College credit courses are of unspecified duration that carry at least 3 quarter credits from University of Hawaii.

TABLE . Number of Persons Trained - Regular School Year

	-										
LS ONALS	trained	College credit	ı	1	1	ı	1	ı	1	·	0
ESSTONA	Number tra	Work- shop	1	ı	ı	ı	ı	ı	ı		0
BOTH PROFESSIONALS AND PARA-PROFESSIONALS	Nun	Orient- ation	201	93	15	16	92	16	,		433**
A)		Total Em- ployed	92	19	15	26	67	16	14		231
ALONE	trained	College credit	1	i	ı	ı	1	ı	ı		0
SIONALS	Number tra	Work- shop	,	.,	ı		ı	1	i		0
PARA-PROFESSIONALS ALONE	Num	Orient- ation	1	ı		1	1_	,	5		7
PA		Total Em- ployed	32	9	6	10	07	7	7		108
LONE	ned	College credit	•		1	i	1	ı	ŧ		0
ONALS A	er trained"	Work- shop	,	ı	ı	ı	ı		i		0
PROFESSIONALS ALONE	Number	Orient- ation	1		⊶ .	ı	1	2	7		တ
		Total Em- ployed	09	13	9	16	6	6	10		123
		DISTRICT	Honolulu	Leeward	Central	Windward	Hawaii	Maui	Kauai	,	Total

<sup>\*</sup> The training categories used refer to type and duration. Orientations are less than one week, full time equiv-College credit courses are of unspecified duration that carry at least 3 quarter credits from University of Hawaii. alency. Workshops are of one week or greater duration.

\*\* Includes training of unpaid para-professionals who assist projects.



#### IX. COMMUNITY-PARENT INVOLVEMENT

#### NATURE AND EXTENT

The community and parent involvement component of the Title I programs in this State has not yet been fully developed. Although many cases of parent involvement can be cited, these cases are generally limited to visiting of projects for information or culminating activities, assisting teachers in implementing the program, evaluating projects to the extent of answering questionnaires, or participating in Compensatory Education workshops with some planning input; no one project has a written plan that includes serious inputs at all levels—the planning, implementation and evaluation levels.

While awaiting the revised Federal guidelines on parent-community involvement, the Compensatory Education Section has adopted the following guidelines for the State in order to insure more comprehensive involvement:

"The application should describe how the parents were consulted and involved in the planning of the Title I project. It should also describe how the parents will be consulted and involved in the operation and evaluation of that project.

"The participating parents must (1) be identified as being representative of the parents of the children in the project, (2) be fully informed of the district concerning the purposes and requirements of Title I and the resources available under various programs to meet the needs of educationally deprived children, (3) have had adequate opportunities to discuss the needs of educationally deprived children with teachers, administrators and representatives of other agencies having knowledge of such needs and (4) have had adequate opportunities to consider and make recommendations on the activities and services set forth in the application."

#### EXAMPLE OF INVOLVEMENT

Because the Alae Project is a live-in project and because the community from which the children come is the target area of other projects, it probably has the greatest parent-community involvement component in the State. Parents in the project visit the children, volunteer to assist on excursions, occasionally spend the night with the children and receive assistance from project personnel to insure carryover of learning in nutrition from school to the home.

Questions on this report should be addressed to the Superintendent of Education, Department of Education, State of Hawaii.

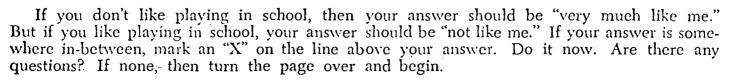


APPENDIX A

School Attitude Inventory

#### SCHOOL ATTITUDE INVENTORY

Name:	School:					
Grade:	Date:					
INSTRUCTIONS:						
Fill out the blanks above with your name,	, grade, school, and today's date. Do this now	٧.				
feel about school. Read each statement very c	statements about what you think and how you arefully, and then decide how much each state k your answer on the space provided under each	e-				
	or wrong answers. Please answer honestly so the understand you better and help you more wit way affect your grades in school.					
EXAMPLE 1						
I love school.						
	•					
Not Slightly Somewha like me like me	t Pretty much . Quite Very much like me like me like me	 !				
If you love school, mark an "X" on the line school, mark an "X" on the line above "not like like you, then mark an "X" on the line above	ne above "very much like me." If you do not love me". If the statement is slightly like you or quite your answer. Mark your answer now.	re te				
EXAMPLE 2						
I don't like playing in school.						
Not Slightly Somewha like me like me	t Pretty much Quite Very much like me like me	_ ì				





1. I can work alone for a period of time.

		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
2.	Ι	complete m	y work not fini	shed the day b	efore.		
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
3.	Ι	do my scho	ool assignments	regularly.			
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
4.	Ι	read withou	t anybody tellir	ng me to.			
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
5.	I	enjoy books	, newspapers, a	nd magazines.			·
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
6.	I	carry out r	ny activities ui	ntil they are fi	nished.		
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
7.	Ι	easily get di	stracted from s	tudy by things	going on around	me.	
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
8.	I	know that	I can do what	the teacher w	rants me to do.		
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
9.	Ι	am intereste	ed in the result	s of my work.			
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
10.	Ι	stick with a	job until finish	ned.			
		Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
	•			99			



11. I like most of my teachers.

	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
12.	I don't feel lil	ce doing school	work.			
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
13.	I come to sch	ool regularly.				
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
14.	I do extra sch	ool work.	·			
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
15.	I hate school.					
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
16.	I get right dov	vn to work if I	have studying t	o do.		
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
17.	I usually get r	ny classwork in	early.	·		
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
18.	In class I ofte	n look out the	window or at t	things around the	e room.	
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
19.	I find learning	g new things in	nteresting.			
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
20.	I like to go to	school.				
· ,	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me



21. I think school is fun.

	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
22.	I think school	work is useless	•			
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
23.	I would like to	o leave school.				
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
24.	I am doing we	ell in school.				
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
25.	It's nice to be	e in school.				
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
26.	I think teache	ers give us too	much work.			
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
27.	I think school	l is like a prison	n.	••		
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
28.	I think teach	ers are not inte	rested in me.			
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
29.	I think school	l is important.				
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
30.	School is unp	oleasant.				
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
			21			



APPENDIX B

Abstract of Approved Projects



TITLE I, P. L. 89-10

FOR FISCAL YEAR 1970
(1969-70 SCHOOL YEAR)

OFFICE OF INSTRUCTIONAL SERVICES

COMPENSATORY EDUCATION SECTION

NOVEMBER, 1970



# DEPARTMENT OF FORCATION OFFICE OF THEFTWOFFICIAL SERVICES TO COMMUNICATION EDUCATION FORCATION FORCATION 96804

## 1969-1970

#### DISTRICT ALLOCATIONS

hororara	\$ 1,252,889
CENTRAL OAFU	197,425
LEEWARD OAUU	276,994
UINDWARD OAHU	276,994
PAWALI	356,742
MAUI	149,275
KVNYI	95,828
TOTALS	\$ 2,606,146



#### TITLE I, P. L. 39-10

## APPROVED PROJECTS FOR FISCAL YEAR 1970

### SPECIAL PROJECT FOR CHILDREN IN INSTITUTIONS FOR DELINQUENT CHILDREN

PROJECT NUMBER	DISTRICT	REGULAR TERM	TOTAL
21	Windward Oahu	\$12,000	\$12,000



DISTRICT

21

Windward Oahu Olomana

Gr. 7-12

#### PROJECT DESCRIPTION

AN EDUCATIONAL AND BEHAVIORAL INTERVENTION PROGRAM FOR DELINQUENT ADOLESCENTS - The proposed project will seek to provide additional educational materials and equipment to develop a highly individualized structure for instruction. Provisions will be made to include self-instructional or automated learning. Reinforcement principles and contingency management techniques will be applied. A system for immediate reinforcement and recognition of successful achievement at any level of desired behavior will be implemented. The consulting services of the University of Hawaii Youth Development Center will be used.

Amount Approved: \$12,000 (Amended to \$9,000)

Personnel: Existing assigned personnel will

be used.

No. of Children to be Served: 53

G69-241E-475-4-206

## TITLE I, P.L. 89-10

# APPROVED PROJECTS FOR FISCAL YEAR 1970

## COMPREHENSIVE PROJECTS (Guidance, Compensatory, Remedial)

PROJECT NUMBER	DISTRICT	REGULAR TERM	· <b>-</b> .	.~ moma r	
NUMBER	DISTRICT	REGULAR TERM	- <del>-</del>	TOTAL	
24	Honolulu	\$249,074		\$249,074	
25	Honolulu	108,476	·	108,476	
26	Honolulu	341,218		341,218	
		<del></del>		<del></del>	
	Totals	\$698,768		\$698,768	

DISTRICT

24

Honolulu
McKinley High
Central Inter.
Washington Inter.
Kaahumanu
Kaiulani
Lanakila
Likelike
Royal
Linekona

Gr. K-12

Compensatory Remedial Guidance

#### PROJECT DESCRIPTION

DECREASING SCHOOL ALIENATION PROJECT - McKINLEY COMPLEX - This project has been designed to provide the following:

- a. An expanded curriculum to overcome cultural impoverishment, enhance motivation, widen the horizon of pupils and include activities which are aimed at compensating for early experimental deficits, especially those of language arts and cognitive development.
- b. A highly specialized rehabilitative educational center for students who have been unable to profit from the regular program of instruction because of emotional and/or behavioral problems and other manifestations of conflict with school achievement.
- c. The development of materials to involve the disadvantaged child, to extend his cognitive development, and needed remedial assistance.
- d. An articulated program of instruction which will aim at a common and concerted program approach in schools serving in particular pockets of poverty.
- e. A school climate which will be conducive to the implementation of needed curricular modifications and adaptations.

The activities provided in this project include:

- a. Adjustment class
- **b.** Outdoor education
- c. Educational assessment team
- d. Modified curriculum classes
- e. Counseling and guidance services

Amount Approved: \$249,074

**Personnel:** 11 Educational Assistants (Full time)

- 8 Elementary Teachers (Full time)
- 3 Modified Curriculum Teachers (Full time)
- 4 Counselors (Full time)
- 1 Counselor (Half time)
- 1 Coordinator (Part time)
- 2 Consultants (Part time)
- 7 Activities Advisors (Part time)

No. of Students to be Served: 825

#### DISTRICT

### Honolulu Palolo

Anuenue Jarrett Inter. Kaimuki High

Gr. K-12

Remedial Compensatory Guidance

#### PROJECT DESCRIPTION

DECREASING SCHOOL ALIENATION PROJECT - KAIMUKI COMPLEX - This project has been designed to provide an expanded curriculum, a specialized rehabilitative educational center for school alienated pupils with emotional and/or behavioral problems, the development of materials to involve the disadvantaged child, an articulated program of instruction and a school climate that promotes needed curricular modifications and adaptations. The activities to be provided include an adjustment class, outdoor education, an educational assessment team, modified curriculum classes, counseling and guidance services, "Life Adjustment" activities, and student activities.

Amount Approved: \$108,476

Personnel:

- 3 Educational Assistants (Full time)
- 3 Elementary Adjustment/Motivation

Teachers (Full time)

2 Secondary Adjustment/Motivation

Teachers (Full time)

- 3 Counselors (Full time)
- 2 Counselors (Half time)

No. of Students to be Served: 358



DISTRICT

26

Honolulu
Farrington High
Dole Intermediate
Kalakaua Inter.
Fern
Kaewai
Kalihi
Kalihi-kai
Kalihi-waena
Linapuni
Puuhale

Gr. K-12

Compensatory Remedial Guidance

#### PROJECT DESCRIPTION

DECREASING SCHOOL ALIENATION - FARRINGTON COMPLEX - The objectives of this project are:

- a. To raise the achievement level of educationally disadvantaged students in basic education.
- b. To improve the holding power of school and minimize the number of cases of truancy, class cutting, absences, and dropouts.

In accord with these objectives, this project is designed to provide an expanded curriculum, a highly specialized rehabilitative educational center for school alienated students, development of materials involving the disadvantaged child, an articulated program of instruction and a school climate that will be conducive to the implementation of needed curricular modifications and adaptations.

Activities that are provided for in this project include an adjustment class, outdoor education, an educational assessment team, modified curriculum classes, and counseling and guidance services.

Amount Approved: \$341,218

Personnel:

- 13 Educational Assistants (Full time)
  - 6 Elementary Language Development
    - Teachers (Full time)
  - 1 Life Adjustment Teacher (Full time)
- 8 Modified Curriculum Teachers (Full time)
- 2 Educational Assessment Team Members (Full time)
- 1 Educational Assessment Team Member (Half time)
- 2 Counselors (Full time)
- 1 Counselor (Half time)
- 1 Coordinator (Part time)
- 2 Consultants (Part time)

No. of Students to be Served: 1,124



TITU: I, P. L. 89-10

## APPROVED PROJECTS FOR FISCAL YEAR 1970

## COMPENSATORY PROJECTS

#### REGULAR TERM

PROJECT		
NUMBER	DISTRICT	TOTAL
1	Hawaii	\$ 215,110
7	Kauai	10,631
10	Leevard Oahu	36,553
12	Leeward Oahu	54,308
18	Windward Oahu	16,931
19	Maui	35,498
23	Honolulu	98,838
27	Honolulu	15,500
30	ilonolulu	36,000
		\$ 519,369

PROJECT NUMBER	DISTRICT	PROJECT DESCRIPTION
1	Hawaii Kapiolani Hilo High Konawaena High Kealakehe Holualoa Konawaena Elem. Keaukaha Hookena Naalehu Laupahoehoe High Paauilo Inter. Pahoa High Gr. PreK-12 Compensatory	COMPENSATORY PROJECT - This project provides for the following activities:  a. English Team Teaching b. Field trips and excursions c. Expansion of educational resource centers d. Individualization of instruction e. Expansion of library services f. Experiences to broaden the children's knowledge of the community g. Experiences to build the child's self-image. h. Parental involvement in school programs. i. Broadening the counseling services. j. Experiences in oral language development  Amount Approved: \$215,110  Personnel: 1 Director, Reading Clinic (Full time) 2 Elementary Teachers (Full time) 1 Library Assistants (Full time) 1 Stenographer (Full time) 1 Stenographer (Full time) 1 Cook (Part time) 1 Dorm Attendant (Part time) 2 Tutors (Part time)  No. of Students to be Scrved: 1,359
		<b>G69-233E-735-5-1815</b> 0

-8- 42

DISTRICT

18

Windward Oahu Waiahole

Gr. Pre-K

Compensatory

#### PROJECT DESCRIPTION

PRE-KINDERGARTEN FOR DISADVANTAGED 4 YEAR OLDS - This is a continuation project. It is designed to continue with a regular Head Start pre-school and emphasize fostering of language arts skills. The project will consist of play experiences, flexibly arranged, where children can learn as they play with materials and share experiences with their peers and adults. Lunch services and cultural exposure through excursions and field trips are included.

Amount Approved: \$16,931

Personnel: 1 Pre-School Teacher (Full time)

1 Educational Assistant (Full time)

No. of Students to be Served: 20

G69-233E-734-4-18142

DISTRICT

19

Maui Hana Haiku Kamehameha III

Gr. Pre-K

Compensatory

#### PROJECT DESCRIPTION

COMPENSATORY-HEAD START PROJECT - This project is designed to provide experiences that will allow the educationally deprived children to begin the regular school programs on moe equal terms with their more fortunate classmates. The project will provide a curriculum rich in first-hand and multi-sensory experiences to develop positive self-image, language, basic skills and the ability to solve problems. Two of the sub-projects will be implemented in the second semester.

Amount Approved: \$35,498

Personnel: 1 PreSchool Teacher (Full time)

2 PreSchool Teachers (Full time -

Second Semester)

1 Educational Assistant (Full time)

2 Educational Assistants (Full time -

Second Semester)

No. of Students to be Served: 45

G69-233E-736-6-18160

DISTRICT

7

Kauai Hanalei

Gr. Pre-K

Compensatory

#### PROJECT DESCRIPTION

PRE-SCHOOL EXPERIENCE PROJECT FOR THE EDUCATIONALLY DEPRIVED - This is a continuation project. It is a full-time full-year project. The major emphasis will be to provide the children from economically disadvantaged families with the kinds of experiences that will enable them to succeed in the regular school program. Carefully planned field trips as well as other enriching experiences are to be included.

Amount Approved: \$10,631

Personnel: 1 Pre-School Teacher (Full time)

No. of Students to be Served: 14

G69-233E-737-7-18172

DISTRICT

10

Leeward Oahu Maili Elem. Waianae Elem.

Gr. K-6

Compensatory

#### PROJECT DESCRIPTION

COMPENSATORY EDUCATION FOR THE EDUCATIONALLY DEPRIVED - This project provides for the following components:

- a. Reading and health education activities at the elementary level.
- b. A Supplementary Instructional Materials Center to concentrate on servicing the educationally deprived children at Waianae Elementary School.

Amount Approved: \$36,553

Personnel: 1 Elementary Reading Teacher (Full time)

1 Elementary Health Teacher (Full time)
1 Teacher, Media Specialist (Full time)

1 Stenographer (Full time)

No. of Students to be Served: 122

G69-233E-733-3-18130

**PROJECT** NU: IBER DISTRICT PROJECT DESCRIPTION 12 Leeward Oahu PRE-SCHOOL EDUCATION FOR THE EDUCATIONALLY Nanaikapono DEPRIVED - This is a continuation project. It Waianae Elem. is designed to provide early school experience for the culturally different youngsters. The program will constitute teachers, teacher aides, Gr. Pre-K a nurse's aide and a nurse. Health education Compensatory plays an important role in the total program of the pre-school age child. Amount Approved: \$54,308 Personnel: 2 Preschool Teachers (Full time) 1 Nurse (Full time) 1 Social Worker (Full time) 2 Educational Assistants (Full time)

No. of Students to be Served: 40

G69-233E-733-3-18133

PROJECT
NUMBER

DISTRICT

Honolulu
Fern
Kaewai
Kalihi
Kalihi-kai
Kalihi-waena
Lanakila
Royal

Gr. 1-3

Compensatory

#### PROJECT DESCRIPTION

COMPENSATORY EARLY CHILDHOOD EDUCATION
PROJECT - The Early Childhood Education
Project is a continuation of the project
initiated during the 1968-69 school year.
It provides for an instructional and organizational method within grades 1-3 in which a
third teacher is assigned to a teaching
situation where two are nor normally assigned.
This complements the State Department of
Education's attempt in implementing the
"3 on 2" demonstration project. Seven schools
will be involved in the implementation of this
project.

Amount Approved: \$98,838

Personnel: 11 Primary Grade Teachers

No. of Students to be Served: 220

PROJECT PROJECT DESCRIPTION NUMBER DISTRICT LIKELIKE PRESCHOOL PROJECT - This is a continua-27 Honolulu Likelike tion project and is designed to provide experiences for educationally deprived children to enable them Gr. Pre-K to enter kindergarten on a more equal footing with their peers. The program will emphasize playground activities, classroom activities, and Compensatory carefully planned field trips for the twenty participants. Amount Approved: \$15,500 Personnel: 1 Preschool Teacher (Full time) 1 Educational Assistant (Full time)

G69-233E-731-1-18112

No. of Students to be Served: 20

7-233E-/31-1-10111

-4- 38

PROJECT MULBER

30

DISTRICT

Eonolulu

Palolo

Lanakila

PROJECT DESCRIPTION

PROJECT FOLLOW THROUGH - A special project for children who have participated in Headstart Project classes. Title I funds are to supplement the regular project funds in providing the participating children an enriched type innovative learning situation.

Amount Approved: \$36,000

Personnel: 3 Teachers

2 Educational Assistants

No. of Children to be served: 456

G-62-233-E-739-9-18181

TITLE I, P.L. 89-10

# APPROVED PROJECTS FOR FISCAL YEAR 1970

#### GUIDANCE AND COUNSELING PROJECTS

PROJECT NUMBER	DISTRICT	REGULAR TERM	SUMMER	TOTAL
3	Hawaii	<b>\$27,87</b> 3		<b>\$27,</b> 875
4	Central Oahu	38,264		38,264
8	Kauai	28,320		28,320
11	Leeward Oahu	19,906		19,906
14	Maui	12,392		12,392
17	Windward Oahu	60,300		60,300
	Totals	\$187,057		\$187,057

DISTRICT

4

Central Oahu Aiea High

Gr. 8-12

Counseling Guidance

#### PROJECT DESCRIPTION

COUNSELING AND GUIDANCE PROJECT TO REDUCE SCHOOL ALIENATION - This is a continuation Waialua High & Elem. project. At Aiea High School this project provides for a counseling and guidance program with slight modifications for a classroom program with stipends for behavior modification. This project at both schools is to provide experiences which will assist in improving the self-image of the students selected. Experiences such as field trips, excursions, camping trips, resource speakers will be used together with planned learning and guidance activities as well as intensive counseling sessions to achieve the project objectives.

Amount Approved: \$38,264

Personnel:

Aica High School

1 Secondary Teacher (Full time)

1 Counselor (Full time)

1 Educational Assistant (Half time)

Waialua High School

1 Counselor (Full time)

No. of Students to be Served: 75

G69-233E-732-2-18121



DISTRICT

Kauai

Kapaa High & Inter. Kalaheo Mobile Class Waimea Kapaa Elem. Kapaa High

Gr. 3-12

Guidance

#### PROJECT DESCRIPTION

COUNSELING AND GUIDANCE PROGRAM FOR THE EDUCATIONALLY DEPRIVED - This project provides for three components:

- a. Student Counseling and Home-School Liaison
- b. Mobile Class
- c. Project Rejuvenation

The first two components are continued from the previous school year while "Project Rejuvenation" is to be initiated during the 1969-70 school year. The objective of this project including all the components is to decrease school alienation in the elementary as well as in the secondary grades. The emphasis will be the same as for the previous year -- to establish meaningful guidance and counseling experiences for the educationally deprived youngsters.

Amount Approved: \$28,320

Personnel: 2 Secondary Teacher-Advisors (Full time)

1 Counselor-Social Worker (Half time)

1 Coordinator (Part time)

2 Elementary Teacher-Advisors (Part time)
2 Secondary Teacher-Advisors (Part time)

No. of Students to be Served: 103

G69-233E-737-7-18171

DISTRICT

Maui Lahainaluna

Gr. 9-12

Guidance

#### PROJECT DESCRIPTION

GUIDANCE-COUNSELING PROJECT - This project is to provide counseling services for the educationally disadvantaged secondary students. The objectives of this project are to improve student attitudes toward school and to raise the educational and occupational expectations of the students.

Amount Approved: \$12,392

Personnel: 1 Counselor (Full time)

G69-233E-736-6-18163

PROJECT NUMBER DISTRICT PROJECT DESCRIPTION 11 Leeward Oahu GUIDANCE PROGRAM FOR THE EDUCATIONALLY Makaha DISADVANTAGED - This project is designed to provide counseling and health services to Gr. 1-3eligible youngsters. These areas are vital to the in-school educational program and provides Guidance meaningful experiences to those in need of such services. Emphasis will focus on the preventive aspects through early identification and follow up. Amount Approved: \$19,906 Personnel: 1 Counselor (Full time) 1 Health Teacher (Full time)

G69-233E-733-3-18132

-21-

PROJECT NUMBER	DISTRICT	PROJECT DESCRIPTION
17	Windward Oahu Castle High Waiahole Hauula Kaaawa Kahaluu Laie Gr. PreK-12 Counseling Guidance	COUNSELING AND GUIDANCE PROGRAM FOR THE EDUCATIONALLY DEPRIVED - Projects involve counseling services to eligible participants. Decreasing school alienation in the elementary as well as in the secondary grades will be the focus of the counselors. Stress will be upon early referral and individual and group counseling techniques will be used. Efforts to develop meaningful working relationship with parents will be intensified.  Amount Approved: \$60,300
		Personnel: 4 Counselors (Full time)  1 Counselor (4/5 time)  1 Counselor (1/5 time)  1 Educational Assistant (Half time)  No. of Students to be Served: 276

G69-233E-734-4-18141

TITLE I, P.L. 89-10

APPROVED PROJECTS FOR FISCAL YEAR 1970

### REMEDIAL PROJECTS

PROJECT NUMBER	DISTRICT	REGULAR TERM	SUMMER	TOTAL
2	Hawaii	\$ 40,415		\$ 40,415
5	Central Oahu	88,573		88,573
6	Kauai	31,871		31,871
9	Leeward Oahu	69,517		69,517
13	Maui	<b>53,</b> 736		<b>53,7</b> 36
15	Maui	8,797		8,797
16	Windward Oahu	107,053		107,053
	Totals	\$399,962		\$399,962



DISTRICT

2

Hawaii District
Hilo High
Hilo Inter.
Honaunau
Keaukaha

Gr. K-12

Remedia1

#### PROJECT DESCRIPTION

REMEDIAL PROJECT - This project has been developed to provide the necessary experiences for the educationally deprived students that will enable them to develop adequate academic skills. Methods to be used include small group remedial reading instruction, use of individualized instructional materials, exposure to cultural experiences, health, dental and counseling services and speech and hearing activities.

Amount Approved: \$40,415

Personnel: 1 Nurs

1 Nurse (Full time)

3 Educational Assistants (Full time) 3 Educational Assistants (Half time)

1 Clerk (Part time)
1 Tutor (Part time)

No. of Students to be Served: 352

G69-233E-735-5-18151

**PROJECT** PROJECT DESCRIPTION DISTRICT NUMBER Central Oahu REMEDIAL AND MODIFIED CURRICULUM - This is a 5 Haleiwa continuation project. The activities provided Halawa center around remedial and developmental Wahiawa instruction on the language arts, with some Waialua emphasis on the social studies at the elementary and intermediate levels. Aiea Aiea Inter. Amount Approved: \$88,573 Gr. K-7 Personnel: 2 Elementary Teachers (Full time) Remedial 1 Secondary Reading Teacher (Full time) 8 Educational Assistants (Full time) No. of Students to be Served: 327

G69-233E-732-2-18120



PROJECT PROJECT DESCRIPTION NUMBER DISTRICT LANGUAGE ARTS REMEDIATION PROJECT - This is a 6 Kauai continuing project. All remedial activities proposed are focused upon the language arts. Kapaa Elementary Koloa Waimea Specificall, the activities are centered on the development of reading skills. Gr. K-6 Amount Approved: \$31,871 Remedial Personnel: 1 Elementary Teacher (Full time) 4 Educational Assistants (Full time) No. of Students to be Served: 107

G69-233E-733-3-18131



**PROJECT** PROJECT DESCRIPTION DISTRICT NUMBER REMEDIAL-LANGUAGE ARTS PROJECT - This is a 13 Maui continuing project. -But for the 1969-70 Kilohana school year, the emphasis has been limited to Paia language arts. Various approaches will be Waihee utilized among which will be included small Kihei group instructon, remedial reading activities, Kula counseling and guidance services, tutorial Wailuku services and individualizing instruction. The objective, which is in accord with that of the Gr. K-8 State, is to improve the achievmeent and skills of the participating students in language arts. Remedial Amount Approved: \$53,736

Personnel: 3 Elementary Teachers (Full time)

4 Educational Assistants (Full time)

1 Tutor (Part time)

No. of Students to be Served: 193

G69-233E-736-6-18161

DISTRICT

Maui High

Gr. 9-12

Remedia1

#### PROJECT DESCRIPTION

REMEDIAL-MODIFIED CURRICULUM - This project is designed to provide a modified English-Social Studies Program for the educationally disadvantaged secondary students. The English and Social Studies Program will be modified into a core program to coordinate the language arts instruction with social studies. It will be possible to assess the needs of the students on an individual basis. This in turn will enable teachers to do corrective and developmental teaching.

Amount Approved: \$8,797

Personnel: 1 Secondary Teacher (Full time)

No. of Students to be Served: 117

G69-233E-736-6-18162

PROJECT NUMBER DISTRICT PROJECT DESCRIPTION 9 Leeward Oahu REMEDIAL EDUCATION FOR THE EDUCATIONALLY DEPRIVED - This is a continuation project Waianae High Nanakuli High & Int. except that Nanakuli High School is changing to the "Fader" activity from the "Off campus Waianac Inter. Nanaikapono community classroom" that was tried last school year. Among the other activities that are to be continued include the following: Gr. 1-2 Gr. 7-12 A language arts team to service an Remedial elementary school. b. A modified curriculum of English, reading and social studies at an intermediate school. c. A modified curriculum using educational

Personnel: 2 Elementary Teachers (Full time)

2 Secondary Teachers (Full time) 4 Educational Assistants (Full time)

1 Stenographer (Full time)

No. of Students to be Served: 218

assistants at a high school.

G69-233E-733-3-18131

Amount Approved: \$69,517

DISTRICT

16 Windward Oahu

Castle High Kahuku High

Hauula

Pope

Kaanwa

Waimanalo Kahaluu

Parker

Laie

Gr. K-12

Remedial

#### PROJECT DESCRIPTION

REMEDIAL AND MODIFIED CURRICULUM FOR THE EDUCATIONALLY DEPRIVED - This is a continuation project. Project activities center around remedial instruction in the language arts for the elementary and the modified curriculum, in the language arts and the social sciences for the secondary. Basic intent of services will be to provide more individual and small group attention to the deprived youngsters. Continuing programs will place special emphasis on improving language skills.

Amount Approved: \$107,053

Personnel: 2 Secondary Teachers (Full time)

1 Secondary Teachers (Half time)
6 Elementary Teachers (Full time)
1 Library Assistant (Full time)

1 Educational Assistant (Full time)
6 Educational Assistant (Half time)

No. of Students to be Served: 494

G69-233E-734-4-18140

TITLE I, P.L. 89-10

APPROVED PROJECTS FOR FISCAL YEAR 1970

## AUXILIARY PROJECTS

PROJECT NUMBER	DISTRICT	REGULAR TERM	SUMMER	REGULAR & SUNMER	TOTAL
22	Honolulu	ur e		\$20,500	\$20,500



22

DISTRICT

Honolulu Project Coordination

**Auxiliary** 

#### PROJECT DESCRIPTION

DISTRICT COORDINATION - The Coordination will assist the District Superintendent in administering and supervising all Title I projects in the Honolulu District, coordinate all evaluations, be responsible for public relations, work closely with the Community Action Programs, and set up a working relationship with private and public school officials. In this continuing project, the Coordinator's position will be funded by the State. There will be 23 schools serviced by the Coordinator. Emphasis will focus on in-service training for personnel involved.

Amount Approved: \$20,500

Personnel: 1 Steno (Full time)

1 Clerk (Full time)

1 Student Help (Part time)
2 Consultants (Part time)

Other Expenses: Equipment

Supplies and Materials

TITLE 1, P. L. 89-10

# APPROVED PROJECTS FOR PISCAL YEAR 1970

#### SUTTIER PROJECTS

	•	
PROJECT NUMBER	DISTRICT	TOTAL
20	Maui	\$ 5,574
29	Havaii	17,372
31	Windward Oahu	6,083
32	Windward Cahu	20,157
33	Windward Oahu	6,100
34	Hawaii	20,476
35	Hawaii	7,295
36	Havaii	5,994
37	Hawaii	4,980
38	Hawaii	9,501
39	Havaii	2,232
40	Hawaii	7,212
41	Hawaii	3,548
42	Honolulu	52,890
43	Honolulu	57,752
44	Honolulu	131,935
45	Kauai	1,000
46	Konolulu	3,027
47	Central Oahu	2,738



Þ	ROJECT			
.;;	TIMER	DISTRICT	TO	TAL
	48	Central Oahu	\$	31,220
	49	Leeward Oahu		19,775
	50	Leeward Oahu		4,500
	51	Lecuard Oahu		5,218
	52	Lecward Oahu		4,222
	53	Maui		5,951
	54	Maui		2,081
	55	Maui		2,592
	56	Navaii		706
	57	Windward Oahu		17,550
	58	Windward Oahu		11,454
	59	Leeward Oahu		750
	60	Lecward Cahu		40,557
	61	Leeward Oaliu		5,025
	62	Maui		2,539
	63	Maui		7,059
			Ś	518.065



DISTRICT

20

Maui

Makawao

Gr. 1-3

Compensatory

PROJECT DESCRIPTION

COMPENSATORY - SUMMER SCHOOL PROJECT - This project is designed to focus on a summer school setting where selected students will be provided with a language arts orientation. The emphasis will be upon improving the oral language of the educationally deprived children.

Amount Approved: \$5,574

Personnel: 6 Elementary Teachers (Full Summer

School Term)

No. of Students to be Served: 30

G69-233E-736-6-18164

#### SUMMER PROJECT

#### PROJECT NO.

#### DISTRICT

#### 29

Hawaii

Konawaena High Kealakeho Holualoa Ronaunau Hookena Naalehu Pahoa Kaniolani Laupahochoe Paaui lo

#### PROJECT DESCRIPTION

Operation SCOPE (Supper Camb and Outdoor Participation Education)

A program involving academic work and outdoor activities will be provided selected students from eligible Title I schools. There will be planned recreation including organized athletics that will assist the boys participating in the project to adjust themselves to the regular schools.

Amount approved: \$17,372

Dates: a. May 25 - July 31, 1970

Aug. 3 - 28, 1970

Personnel: 1 Coordinator

> 1 Teacher 1. Counselor

2 Dorm Attendants 1 Work Supervisor

1 Cook

No. of children to be served: 270

G69233E-735-5-18158

#### STIGHTE PROJECT

PROJECT PROJECT DESCRIPTION DISTRICT FRUE SUIDIER SCHOOL 31 Windward Oahu An individualized instructional program will Pone be offered the students participating in the program that will best meet their needs. A diagnostic prescriptive method will be used and the academic and social needs of the children will be assessed. The instructional program will be planned for each child and the learning denter will be utilized to facilitate independent study. Amount approved: \$6,083 Dates: June 22-July 31, 1970 Personnel: 32 teachers No. of children to be served: 75 C69233E-734-4-18143 32 Windward BEHAVIOR ANALYSIS AND MODIFICATION: PRECISION TEACHING TECHNIQUES PRACTICEM Kahuku High A summer school program to provide participating Laie students individualized instruction in mathe-Hauula matics and language arts. Each student's level Kaawa of achievement will be considered in developing the instructional program. Amount approved: \$20,157 Dates: June 15 - July 24, 1970

Personnel: 1. Coordinator

5 Supervisors

1 Media Specialist

50 Teachers

o reachers

1 Clerk

3 Custodians (Part time)

3 Student Helpers

No. of children to be served: 250

G69233E-734-4-18144

### SHALDE UPPROL

PROJECT PO.	DISTRICT	Fordion dustrator
33	Mindward Oalsu	ETHAVIOR MODIFICATION THROUGH ARE, MUSIC AND RECREATION
	Olomana	
	Gr.7-12	A sin hour per day summer program for the words of the Famil Youth Correctional Center attending Olomana School. The focus of the instructional program will be on art, music and recreation to provide opportunities for the students to develop their talents and to achieve in areas other than academic, and through recognition of their talents to assist them in developing better social behavior patterns.
		Amount approved: \$6,100
		Dates: July 6 - August 14, 1970
		Personnel: 3 Teachers 2 Educational Assistants 1 Coordinator
		No. of children to be served: 60

G69233E-475-4-20601



# SPITTER PROJECT

		The state of the s
PROJECT No.	DISTRICT	PROJECT DESCRIPTION
34	Hawaii Hilo High	OPERATION PILO (Felpin: Individuals to Learn about Occupations)  A pilot project designed to provide school alienated youth with work study opportunities and intense counseling. Field trips to various shops, hotels and industrial concerns will be arranged to provide the participants with an orientation to the many occupational opportunities available.
		Amount approved: \$20,476  Dates: June 15 - July 31, 1970  Personnel: 3 Counselor-Coordinators
		No. of children to be served: 15 G-69233E-735-5-18053
35	Hawaii Hilo Inter. Waiakea Inter. St. Joseph Kalanianaole	OPERATION COPE (Crafts, Outdoors and Physical Education)  The students selected from the intermediate schools will be involved in a program designed to provide them with opportunities to learn various indoor and outdoor sports, crafts and outdoor skills. Counseling will be provided

Amount approved: \$7,295

Dates: June 15 - August 7, 1970

Personnel: 1 Director

3 Teachers

selves to the regular school program.

5 Specialists (Part Time)

to assist the students to better adjust them-

3 Student Helpers

No. of children to be served: 70

# SIMBLE PRESENCES

PROJECT

(...)

36

DISTRICT

Hawaii

Kealahehe Holualoa

Konawaena Elem.

Hanannau Hookena Naalehu Pahoa Kapiolani St.Joseph Laupahoehoe

Paauilo

PROJECT DESCRIPTION

CHURATION VSC (Volcano Summer Camp)

This project is designed to provide selected students from the eligible Title I elementary schools with cultural and educationally enriching experiences in a camp setting. Counseling will be provided the children to assist them in improving their attitudes toward the regular school program.

Amount approved: \$5,094

Dates: August 3 - 28, 1970

Personnel: 1 Coordinator

1 Teacher

2 Student Counselors

1 Custodian 1 Dus Driver

1 Cook

No. of children to be served: 100

G69233E-735-5-18155

37

liawaii.

OPERATION PSA (Prevention of School Alienation)

Waiakea Int. St. Joseph This project is to provide selected students from eligible Title I schools with opportunities to improve their reading skills in an integrated language experience program. Arrangements will be made to provide the children with experiences in music, practical arts and crafts on a voluntary basis.

Amount approved: \$4,980

Dates: June 17 - July 29, 1970

Personnel: 1 Director (Half Time)

2 Teachers
1 Counselor

2 Educational Assistants 1 Librarian (Half Time) 1 Clerk (Part Time) 1 Custodian (Part Time)

No. of children to be served: 40

# distant distriction

SERVICE PROJECT			
project	DISTRICT	PROJECT DESCRIPTION	
38	Patral i	Operation CCC (Constructing Curriculum Contracts)	
		Selected teachers from Title I eligible schools will be involved in a workshop to develop instructional packages to be used in individualized instructional programs in the succeeding second year. Two experienced instructors from Sacramento, California will assist the teachers.	
		Amount Approved: \$9,501	
		Dates: July 27 - August 14, 1970	
		Personnel: 1 Instructor-Director 1 Instructor 20 Teachers	
		No. of children to be served:	
		G69233E-735-5-18051	
39	Hawaii Hookena	OPERATION LAMB (Language Arts and Math Program)	
	nookena	This project is designed to provide selected educationally deprived children with prescribed instructional assistance to help them overcome their deficiencies in language, arts and mathematics.	
		Amount approved: \$2,232	
		Dates: June 1 - July 19, 1970	
		Personnel: Teacher/Coordinator (1)	

No. of children to be served: 30

1 Teacher

1 Student Helper



# SUCHE PROJECT

PROJECT

no. District

PROJUCT DESCRIPTION

40 Hawaii

OPERATION TUTOR (Youth Tutoring Youth)

This project is designed to train selected students from eligible Title I schools to assist their peers in certain areas of learning. Teachers who will participate in this workshop will acquire skills in diagnosing and prescribing materials for the students needing special tutoring help. The teachers and the student tutors will learn to work as teams in assisting the educationally deprived students.

Amount Approved: \$7,212

Dates: Aug. 17-28, 1970

Personnel: 1 Instructor

7 Teachers

No. of children to be served: 35

G69233E-735-5-18050

41 llawaii

OPERATION TEAM (Teaching Eager Amateurs Music)

Hilo Inter.

To provide selected incoming seventh graders with an opportunity to play a musical instrument, participate in a play, and to plan and build stage settings. These planned activities will help the participants to improve their proficiency in the use and command of language skills as well as to build a positive attitude toward school.

Amount approved: \$3,548

Dates: June 15 - July 24, 1970

Personnel: 1 Coordinator-Teacher

1 Drama Teacher
1 Student Helper

No. of children to be served: 40

### Strong to the treet

PROJECT

HO. DISTRICT

42 Fonolulu

PREDICT : SUBJUSTOR

SUMPRETERING INSTITUTE FOR COURSELOUS AND TELCHERS OF THE DISADVANTAGED

A teacher training institute will be conducted through the cooperative efforts of Eonolulu District and the University of Hawaii, College of Education, Teachers, counselors, educational assistants, parents from the eligible Title I schools will participate in the training. Three classes of twenty children each will provide the laboratory experience for the participants.

Amount Approved: \$52,890

Dates: June 17 to July 29, 1970

Personnel: 1 Director

1 Ass't. Director

1 Clerk 36 Teachers

13 Counselors

18 Educational Assistants

18 Parents.

No. of children to be served: 60

G69233E-731-1-18114



# SITTAR PROJECT

#### PTOJECT

No. DISTRICT

43 Ponolulu

Central Int. Dole Int. Halakana Int. Filo Int.

# PROJECT DESCRIPTION

#### FORE EMPERIENCE CAMP

- A. A summer camping experience will be provided youngsters aged 13 to 15, who will be riven work experiences and earn monetary rewards.
- B. A six-week came experience for sixty teen-aged boys will be hold at Wairea School on Lawaii. These boys will be provided with out-door work experiences and earn monetary rewards. Intense personalized counseling services will be provided. The goal of these two components is to help the participating students to develop better self-images and self-understanding.

Amount Approved: \$57,752

Dates: A. June 17 - August 7, 1970

E. June 22 - July 31, 1970

#### Personnel:

A. 1 Camp Director 4 Camp Councelors

B. I Camp Director

1 Principal

4 Camp Counselors

1 Cool:

1 Assistant Cook

No. of children to be served:

A. 72

B. 60

G69233E-731-1-18116



mounce.

Mamilton

Plance dicentries

41.

Fonolulu

COMPENSATORS SUBJUD ACTIVITIES

All Title ! Elicible Schools in District Children selected from the Title i elicible schools in the district will participate in a special summer program stressing language arts and non-academic activities such as arts and crafts, music, drama and physical education. A camping component is included to provide the participating children with outdoor educational experiences.

Amount Approved: \$131,935

Dates: June 17 to July 29, 1970

Personnel: 81 Teachers

20 Center Directors

3 Counselors

1 Summer Director

1 Evaluator

2 Research Assistants

3. Psychological Workers 8 Educational Assistants

20 Clerks

20 Custodians

No. of Children to be Served: 1,540

G69233E-731-1-18115

# מינות מינות מינות מונית מינות מינות

SUTTUR PROJECT			
PROJECT	DISTRICT	PROJUCT DESCRIPTION	
45	Vauai	SUMBER CAMP PROJECT FOR THE EDUCATIONALLY DEPRIVED	
	Kapaa Figh Kapaa Elem. Waimea Elem.	Twelve selected boys from the cligible schools will be provided outdoor education and camping opportunities. They will learn outdoor living skills and will be provided with intense counseling services to help them adjust to the regular school program.	
		Amount approved: \$1,000	
		Dates: June 13 - 27, 1970	
		Personnel: Contract with YMCA	
		No. of children served: 12	
		G-69-233-E-737-7-18173	
46	Honolulu	FOOD SERVICE AND HOSPITALITY EDUCATION PROJECT	
	Farrington Kaimuki HcKinley	To provide selected deprived students among eligible high school students with an opportunity to learn the skills of food service and related services. This would provide the participants with saleable occupational skills upon leaving the school setting.	

Amount Approved: \$3,027.50

Dates: June 15 - July 24, 1970

Personnel: Contract with Kapiolani Community College

G-69-233-E-731-1-18117

# SUTHER PROJECT

PROJECT PROJECT PROJECT DESCRIPTION 47 Central Oabu OPERATION RESCUE

Aiea High

Provide students who have failed in English and Social Studies with rlanned individual instruction to assist them in acquiring practical knowledge of the subject areas. Monetary inducements will be made to encourage better academic performance.

Amount approved: \$2,738

Dates: June 17 - July 29, 1970

Personnel: 2 Secondary Teachers

No of children to be served: 30

G-692331:-732-2-18122

43 Central Oahu

Wailua Figh & Inter.
Alea Inter.

DECREASING SCHOOL ALIBMATION-EMBARCING RETTER LIVING

To provide selected intermediate school students who have been identified as educationally deprived with intensive individual and group counseling in camping sessions. These experiences are to assist the participants in developing better self images which will improve their academic work.

Amount approved: \$31,220

Dates: June 15, July 29, 1970

Personnel: 2 Camp Directors (Half Time)

7 Counselors (Half Time)

6 Sr. Counselors

1 Ivaluation Consultant (Part Time)

No. of children to be served: 126

G69233E-732-2-18123

#### 

PROJECT

no. historic

PRESENT DECREES

40

Leeward Calm

SUPER ARTS AND CRAFTS PROCEASE

Valanae Elem.

Students who have been identified as educationally deprived will be enrolled in one of following components besides being provided with outdoor education experiences:

a. Sewing class for girls.

b. Class for study of rochets for boys.

c. Ceramics class

d. Rhythm class

Amount approved: \$10,774.65

Dates: June 15 - July 29, 1970

Personnel: 1 Project Director

5 Teachers

10 Educational Assistants

1 Clerk 1 Custodian

No. of children to be served: 140

G-69233E-733-3-18138

50

Leeward Oahu

REMEDIAL READING AND CULTURAL EMRICHMENT

Waianae Inter.

To provide selected educationally deprived children with individualized instruction in reading and communications skills. Enriching experiences have been included to complement the academic program.

Amount approved: \$4,500

Dates: June 15 - July 29, 1970

#### Personnel:

1 Project Director

3 Teachers

1 Educational Assistant

1 Clerk (Part Time)

1 Custodian (Part Time)

No. of children to be served: 50

G-69233E-733-3-18136

# SUMMER PROJECT

PROJUCT 1.0

DISTRICT

PROJECT DESCRIPTION

51

Leeward Oahu

MANARULE RESEDIAL AND CULTURAL EURICHTERT

PROGRAM

Manakulu Figh

To provide selected educationally deprived children with experiences in the following areas: (1) reading. (2) social studies, (3) physical education and recreation, and (4) music and practical arts. Cultural enrichment activities will be included in conjunction with the academic program.

Amount approved: \$5,218

Dates: June 15 - July 29, 1970

Personnel: 1 Director (Part Time)

5 Teachers

1 Secretary (Part Time) 1 Custodian (Part time)

No. of children to be served:

G-69233E-733-3-18134

**5**2

Lecward Oahu

ART AND PHYSICAL EDUCATION PROGRAM

Waianae Figh

To provide selected educationally deprived students with experiences in arts and crafts and physical education and recreation.

Amount approved: \$4,222.44

Dates: June 15 - July 29, 1970

Personnel: 1 Teacher

1 Project Director 1 Student Aide

No. of children to be served: 40

G-69233E-733-3-18135

# SUPER PROJECT

PROJECT NO.	DISTRICT	PROJECT DESCRIPTION
53	Maui	SUDDER PRE-SCHOOL

Wailuku To provide selected children from deprived families with experiences in an organized school setting.

Amount Approved: \$5,951

Dates: June 15- July 29, 1970

Personnel: 1 Project Director

2 Teachers

2 Educational Assistants
1 Typist (Part Time)
1 Custodian (Part Time)

No. of children to be served: 30

G 69233E-736-6-18167

54 Maui SUMMER PRE-SCHOOL

Kamehameha III To provide selected pre-school deprived children with planned activities in a school setting.

Amount approved: \$2,081

Dates: June 15 - July 29, 1970

Personnel: 1 Teacher

1 Educational Assistant
1 Clerk (Part Time)
1 Custodian (Part Time)

No. of children to be served: 15

G-69233E-736-6-18166



# SETTER PROJECTS

PWINT

170

PLEMICE

PRODUCT PLACEMENTS

55

Maui

SECTION PRE-ECTOOL

Pailtu

A planned program of activities to be provided a group of pre-school and children the have been identified as deprived. They will be provided with group as well as individual activities.

Amount Approved: \$2,592

Dates: June 15 - July 29, 1970

Personnel: 1 Teacher

1 Educational Assistant 1 Clerk (Part Time) 1 Custodian (Part Time)

No. of children to be served: 15

G-69233-E-736-6-18165

56 Pawaii

LAMARILA COCRUNITY STUDY CENTER

Hilo High Hilo Inter. Kapiolani To provide selected children with opportunities to extend through the summer months activities in reading and individual study.

Amount approved: \$706

Dates: July 1 - August 31, 1970

Personnel: 1 Library Aide

No. of children to be served: 275

SUMMIR PROJECT		
PROJECT	DISTRICT	PROJECT DESCRIPTION
57	Mindward Oahu	WINDWARD DISTRICT SUIDUR ART PROJECT
	Malahole Kahuluu Hauula Laie Eaaawa	To provide selected students who have been identified as being educationally deprived with opportunities to participate in an intensive program emphasizing Pawaiian arts, crafts and culture. This experience will enhance their self-image and assist the students to improve their academic work.
		Amount approved: \$17,550
		Dates: June 15 - July 29, 1970
		Personnel: 1 Project Director
		8 Teachers
		No. of children to be served: 220
		G-69233E-734-4-18146
58	Windward Oahu	POPE-WAIMANALO SUPMER ART ENRICHMENT PROJECT
	Waimanalo Pope	To provide selected students who have been identified as educationally deprived with opportunities to participate in an intensive in-depth summer art enrichment program with an emphasis on Rawaiian arts, crafts and culture. These children will be provided opportunities to achieve success which will enhance their regular academic work.
		Amount approved: \$11,454

Dates: June 15 - July 29, 1970

Personnel: 1 Project Director 3 Teachers

No. of children to be served: 100

G-69233E-734-4-18145



# SUMMER PROJECT

PROJECT NO.	DISTRICT	PROJECT DESCRIPTION		
59	Leeward Oahu	COORDINATION OF TITL		

# COORDINATION OF TITLE I PROJECTS

To provide coordination and administration in support of the Title I projects in the Leeward Oahu District. The evaluator/writer will assist the District Coordinator in providing these services.

Amount Approved: \$750.00

Dates: June 22 - July 29, 1970

Personnel: 1 Evaluator/writer

No. of children to be served:

G-69233E-733-3-18030

60 Leeward Oahu

MAKAHA-MAILI LANGUAGE SKILLS PROJECT

Makaha Maili

To provide selected children identified as being educationally deprived with opportunities to participate in planned individualized educational activities. The activities include reading. speaking, listening, creative writing and creative art. Enrichment activities will be planned to supplement the academic activities.

Amount approved: \$40,557

Dates: June 15 - July 29, 1970

Personnel: 1 Project Director

24 Teachers 1 Librarian

1 Clerk (Part Time) 1 Custodian (Part Time)

No. of children to be served: 471

G-69233E-733-3-18137

# SUMMER PROJECT

PROJECT

NO. DISTRICT

PROJECT DESCRIPTION

61

Leeward Oahu

NANATKAPONO SUMMER LANGUAGE PROGRAM

Nanaikapono

To provide a group of the most seriously educationally deprived students with opportunities to participate in remedial and enrichment activities to strengthen their communication and language skills.

Amount approved: \$5,025

Dates: June 15 - July 29, 1970

Personnel: 1 Project Director

6 Teachers

3 Educational Assistants

1 Clerk 1 Custodian

No. of children to be served: 198

G-69233E-733-3-18031

62 Maui

LANGUAGE ARTS AND ARITHMETIC PROGRAM

Wailuku

To provide a group of educationally deprived students an opportunity to participate in academic learning activities that will assist them in retaining the knowledge gained during the regular school year.

Amount approved; \$2,539

Dates: June 15- July 29, 1970

Personnel: 2 Teachers

1 Clerk (Part-time)

1 Custodian (Part-Time)

No. of children to be served: 30

G-69233E-736-6-18061

# SUMME PROJECTS

PROJECT

NO. DISTRICT

PROJECT DESCRIPTION

63

Maui

SUIDAR SCHOOL

Maui l'igh

To provide a group of selected educationally deprived students with an opportunity to participate in individualized educational activities designed to improve their reading and writing skills.

Amount approved \$7,059

Dates; June 15 - July 29, 1970

Personnel: 1 Project Director

5 Teachers 1 Clerk

No. of children to be served: 50

G-69233E-736-6-18168



# APPENDIX C

Evaluative Analysis of Data

bу

Education Research and Development Center University of Hawaii



# EVALUATIVE ANALYSES OF DATA

PROVIDED BY 1969-70 TITLE I (P.L. 89-10) PROJECTS

ADMINISTERED BY THE HAWAII STATE DEPARTMENT OF EDUCATION

A Final Report to the
Hawaii State Department of Education
on Services Provided Under Contract with the
Education Research and Development Center (University of Hawaii)

Education Research and Development Center University of Hawaii Honolulu, Hawaii

August 1970

#### EVALUATIVE ANALYSES OF DATA

PROVIDED BY 1969-70 TITLE I (P.L. 89-10) PROJECTS

ADMINISTERED BY THE HAWAII STATE DEPARTMENT OF EDUCATION

# Participating EDRAD Staff:

Frederick T. Bail, Ph.D., Assistant Researcher (Supervisor)
Donald A. Leton, Ph.D., Researcher
Kendel S. Tang, Ph.D., Assistant Researcher
Patricia Leong, M.Ed., Assistant in Research
Eileen Zukemura, M.A., Assistant in Research
Robert Bloedon, M.A., Assistant in Research
Caroline Murata, Student Help
Joanne Otsuka, Student Help
Sharon Sato, Student Help
Merlene Kamiya, Student Help
Jane Ito, Stenographer
Alice Inada, Stenographer

A Final Report to the
Hawaii State Department of Education
on Services Provided Under Contract with the
Education Research and Development Center (University of Hawaii)

David G. Ryans, Director
Education Research and Development Center
University of Hawaii
Honolulu, Hawaii

August 1970

# FOREWORD

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The carrying out of EDRAD's responsibilities in the evaluation of the 1969-70 Title I Program conducted by the Hawaii State Department of Education was under the supervision of Dr. Frederick T. Bail. This report was written by Dr. Kendel S. Tang. The processing and analyses of the data were performed by Miss Patricia Leong using computer programs written by Miss Eileen Zukemura and Mr. Robert Bloedon.



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#### I. Introduction

Contract between the Hawaii State Department of Education (DOE) and the Education Research and Development Center (EDRAD), University of Hawaii completed on October 7, 1969, provided that specified services be performed by EDRAD as part of a statewide evaluation of DOE's educational services relative to Public Law 89-10, Title I Program.

# A. Contract Specifications

The contract between DOE and EDRAD specified that the following services be performed by EDRAD for the Hawaii State Department of Education:

- 1. to compile a list of appropriate standardised tests by major areas and grade levels in light of program objectives and make recommendations to DOE as to the most valid and reliable tests for measuring the stated project objectives (verbal and numerical);
- 2. to assist DOE in the administration of the school alienation inventory (School Attitude Inventory) for students enrolled in Compensatory Education:
- (a) print and score the pretest and posttest of the school attitude inventory;
  - (b) summarize findings for school utilization, and
- (c) discuss results with the Administrator of Compensatory Education;
- 3. to assist DOE in writing instructions for administration of includes ments, including time schedules, etc.;
  - 4. provide statistical analyses of pretest and posttest raw scores;



- 5. to provide schools and DOE with a report of the results and analyses of differences between pretest and posttest data at the conclusion of the project;
- 6. to assist DOE by participating in discussions of the evaluation report with district coordinators;
- 7. to assemble and interpret the statewide data provided by individua! projects involved in the pretesting and posttesting, relative to project objectives, to permit an overall evaluation of pupil achievement; to compile a statewide summary of the evaluation data relating to program objectives for inclusion in the annual Department of Education's Title I report for Fiscal Year 1970.

#### B. Title I Program Objectives

Title I projects included in the evaluation were those whose major purposes were to achieve one or more of the following objectives:

- to improve performance as measured by standardized achievement tests (language arts);
- 2. to improve classroom performance in reading beyond usual expectations;
  - 3. to improve verbal functioning;
- 4. to improve performance as measured by standardized tests (arithmetic and quantitative skills); and
- 5. to improve attitude toward school which may result in reduced dropout rate.

# C. Review of EDRAD-DOE 1969-70 Evaluation Efforts

As a preliminary to formal contractual agreement entered into by DOE and EDRAD, an outline of events and services to be shared by DOE



and EDRAD in the 1969-70 evaluation of Title I Program was prepared by EDRAD and agreed upon by DOE. The outline specified the extent of EDRAD and DOE responsibilities in carrying out evaluative procedures relative to Title I Program and the tentative dates on which certain evaluative activities were to be performed.

According to the outline, EDRAD assumed responsibility for the following:

- make recommendations to DOE concerning the most valid and reliable measures for evaluating statewide Title I Program objectives;
  - 2. provide DOE with School Attitude Inventory (SAI) forms;
  - 3. score and analyze SAI responses;
- 4. analyze pretest and posttest scores of Title I students on recommended standardized tests; and
- 5. prepare summary of results for inclusion in the DOE Title I report for fiscal year 1970.

DOE assumed responsibility for the following:

- 1. order standardized tests;
- survey project objectives and population sizes from field projects; and
  - 3. administer pretests and posttests.
- 1. Recommendations. In the hope that the 1969-70 evaluation would be more effective than the previous ones, EDRAD made the following recommendations in the 1968-69 final report (EDRAD, 1969, p. 44):
- a. "that pretests be administered in late September rather than in late November (as was the case this year, 1968-69);
- b. "that a test of arithmetic and quantitative skills also be administered in order to determine the extent to which objective No. 4 of Title I projects is being achieved. For this purpose, it is recommended



that the Arithmetic Computation subtest of the Stanford Achievement To be used. In the interest of economy, it is further suggested that only one form of the test be used, the same form being employed for both profest and posttest, since it is quite unlikely that familiarization effect will significantly operate over seven to eight months with purely numerical computations. Test security will, of course, be important.

"The tests designated for the appropriate grade levels for Title I students are listed below:

Stanford Achievement Test, Primary I - Grades 2-3
Stanford Achievement Test, Primary II - Grades 4-5
Stanford Achievement Test, Intermediate I - Grades 6-7
Stanford Achievement Test, Intermediate II - Grades 8-9
Stanford Achievement Test, Advanced - Grades 10-12

- 3. "that the School Attitude Inventory be included in the testing program in order to estimate the extent to which Objective No. 5 of Title I projects is being achieved. Only the Upper Grade Form of this instrument will be administered, and only grades 4-12 included;
- 4. "that if the Department of Education wants EDRAD to perform an extra service of also describing the most successful projects, it should provide (the latter) information relative to significant features on each project, by grade level."
- 2. <u>Implementation</u>. The first recommendation in last year's report was not carried out. Although DOE was to have ordered the recommended standardized tests on August 20, 1969, for administration in late September, pretesting of standardized tests was not carried out until local January, 1970. Pretesting for only the SAI was done in early November, 1969. EDRAD furnished DOE with the SAI forms in September, 1969, as scheduled. The instrument could not be administered in September since



DOE had not yet made the survey of objectives and population sizes of Title I field projects. This survey was actually done in early October, 1969. It was scheduled to have been completed by August 25, 1969.

The second, third, and fourth recommendations were implemented in 1969-70. DOE furnished EDRAD with a list of Title I project activities and/or services as suggested in the fourth recommendation and EDRAD identified and described the most successful projects in terms of their activities and/or services.

Incoming data from various participating schools were carefully checked by EDRAD against data furnished by DOE on the latter's survey of project objectives and population sizes. Title I projects which had Objectives 1, 2 and 3 were administered the Metropolitan Readiness Tests in grades preschool through one and the Gates-MacGinitie Reading Tests in grades two through twelve. Projects which claimed Objective 4 were administered the Arithmetic Computation subtest of the Stanford Achievement Test. It should be noted that these standardized tests were recommended to be administered at the grade levels approximately two grades above the grade norms of the tests. In other words, tests designed for average fourth graders were administered to sixth grade Title I students. Projects which had Objective 5 were given the SAI in grades four through twelve as earlier recommended.

3. Irregularities in test administrations. Some schools submitted test data which were not appropriate for their stated objectives. Other schools delivered posttest data only (no pretest) or pretest data only (no posttest) for certain individuals.

Posttest measures were administered as scheduled except for the School Attitude Inventory. The SAI was administered in March, 1970, to about half of the Title I students who were supposed to take it and



again in April, 1970, to the remaining half. The SAI was originally scheduled to be administered in March, 1970, but due to about two months! delay in its initial administration, EDRAD suggested in early February that the SAI be administered in April instead of March, in order to lengthen the testing interval between pretest and posttest to five months. Some schools, however, administered the SAI in March and others administered it in April, 1970. SAI data were therefore analyzed separately by testing interval (four or five months) and combined and analyzed together by grade level in the statewide evaluation.

## D. <u>Description of Evaluative Procedures</u>

The original design for the Title I evaluation was basically a pretestposttest analysis of mean differences, i.e., average gains or losses. The
evaluation instruments were to be administered to Title I students early
in the school year and again after an interval of seven to eight months,
i.e., toward the end of the school year. It was assumed that gains made
by students participating in Title I projects could be attributed mainly
to activities and services rendered by Title I projects.

For ethical reasons, evaluation of the Title I Program could not be conducted with true experimental controls, i.e., exclusion of some eligible Title I students from the program for the purpose of obtaining a true control group could not be ethically justified. In a sense, however, each Title I pupil served as his own control, since pre- and posttest measures were taken on the same individuals. Furthermore, the different projects themselves served as controls for one another in the comparative evaluation of the various projects. Finally, the norms provided in the manuals of the standardized tests furnished criteria or standards by which to gauge the progress of Title I students relative to national norms.



The irregularities in the test administrations resulted in many schools submitting only posttest data. It was then decided that the 1969-70 posttest means be compared with the 1968-69 posttest means so that use could be made of the information contained in these incomplete data. This was done by comparing the performances of the 1969-70 Title I students with the performances of their counterparts in the preceding school year, assuming that the 1969-70 Title I students were not Title I participants in 1968-69. If the 1969-70 Title I students were the same as the 1968-69 Title I participants, then the 1968-69 and 1969-70 posttest-posttest comparisons would reveal either progress or lack of progress in the course of a school year.

Comparisons of 1968-69 and 1969-70 pretest data were not made for two reasons: (1) many pretest means were missing in the 1969-70 data and (2) different pretest administration dates for 1968-69 (November) and 1969-70 (January) made comparisons of these data inappropriate.

# E. Summary of Analyses Performed

To determine the significance of the observed differences (gains or losses) between pretest and posttest scores, a <u>t</u>-test was performed on the correlated sets of data. This analysis was performed on available test data by school, by grade within school, and statewide by grade. A <u>z</u>-test for uncorrelated data was used in comparing 1968-69 and 1969-70 posttest means.

Finally, to check whether the regression effect was contributing significantly to the statewide results, the data were subjected to a regression analysis. However, since the analysis of regression is a statistical technique to determine the significance of the correlation between predictor (pretest) and criterion (posttest), i.e., the degree of predictability of posttest scores from pretest scores, a significant



F-ratio obtained from this analysis indicates substantial correlation between pretest and posttest scores. It does not, however, indicate whether the correlation is merely a statistical artifact due to the regression phenomenon, a result of the experimental treatment, or some combination of both. The regression effect therefore may be confounded with the treatment effect. In order to make the findings more conclusive, the results were corrected for regression effect where significant F-ratios were obtained in the analysis of regression to determine whether the residuals were significant. It was assumed that the residuals (differences between actual and predicted scores) were due to treatment. More confidence was placed in the gains which remained significant after correction for the regression effect than in those gains which were not significant after the effects of regression was accounted for.

### F. <u>Dissemination</u>

In the dissemination of information relative to Title I evaluation, EDRAD participated in two DOE-initiated conferences with school administrators, project coordinators, and interested teachers. The first conference was held in Honolulu on August 20, 1969, and the second in Wahiawa on May 26, 1970.

Results of analyses of 1969-70 Title I data with the accompanying explanation were sent to each participating school via DOE at the end of the 1969-70 school year. A summary of the results with their interpretations was also submitted to DOE.



# II. Comparison of Title I 1968-69 and 1969-70 Posttest Data

Posttest mean scores by grade level of 1969-70 Title I students on the Metropolitan Readiness Tests and the Gates-MacGinitie Reading

Tests were compared with the corresponding mean scores of 1968-69

Title I students on the same tests to determine indirectly the progress made by 1969-70 Title I students. This was done since, as mentioned in the introduction, many of the 1969-70 Title I participating schools submitted only students' posttest scores.

Comparisons of the 1968-69 and 1969-70 posttest means were performed using a z-test. Table I shows the means, standard deviations and number of cases for both the 1968-69 and 1969-70 groups on the various subtests of the Metropolitan Readiness Tests and the Gates-MacGinitie Reading Tests. The last column of Table 1 shows the z-ratio obtained from the comparison of corresponding means on each subtest. A negative z-ratio indicates that the 1969-70 posttest mean was higher than the corresponding 1968-69 posttest mean on a certain subtest since the mean difference was obtained by subtracting the former from the latter. Significance of the difference between the means compared is indicated by the presence of one  $(p \le .05)$  or two  $(p \le .01)$  asterisks after the corresponding z-ratio.

Examination of the results showed that there were no significant differences between 1968-69 and 1969-70 posttest means on the word meaning, listening, matching, and numbers subtests of the Metropolitan Readiness Tests at the kindergarten level. This indicates that the

1969-70 Title I kindergarten pupils performed just as well as their 1963-69 counterparts (performance of 1968-69 Title I students improved significantly from pretest to posttest in all subtests except listening). (See Table 2 of 1968-69 EDRAD's Final Report to DOE on Title I Evaluation.) The 1969-70 Title I kindergarten pupils had a significantly higher posttest mean score on the alphabet subtest but a significantly lower posttest mean score on the copying subtest than their 1968-69 counterparts. However, compared to their own initial performance on the copying subtest, the 1969-70 kindergarten pupils improved significantly over the school year (see Table 2). The mean scores of the two groups on the total Metropolitan Readiness Tests were not significantly different.

At the first grade level, no statistically significant differences were observed between the 1968-69 and 1969-70 means on any of the subtests with the exception of the word meaning subtest. The 1968-69 first grade Title I pupils had a significantly higher mean on this subtest than the 1969-70 pupils. However, compared to their own initial performance on the word meaning subtest, the 1969-70 first grade Title I pupils made a significant ( $p \le .01$ ) mean gain (see Table 2). The nonsignificant difference between the means of the two groups on the total test indicates that both performed at about the same level on the posttest.

On the Gates-MacGinitie Reading Tests there were no significant differences between the means of 1968-69 and 1969-70 second and third graders on the vocabulary and comprehension subtests. Examination of their respective scores, however, revealed that both groups made



significant gains from pre- to posttest on all the subtests (see Table 3 of this report and Tables 4 and 5 of EDRAD's 1968-69 Final Report).

Significant differences favoring the 1968-69 students were observed between the means of 1968-69 and 1969-70 fourth and fifth graders on both the vocabulary and comprehension subtests of the Gates-MacGinitie Reading Tests. This does not mean, however, that the 1969-70 fourth and fifth graders did not achieve significant gains relative to their initial performance. Even though their final performance was significantly lower than that of their 1968-69 counterparts, those 1969-70 students who had pretest scores also made significant progress, on the average (see Table 4).

Posttest mean scores of the 1969-70 sixth graders were not significantly different from the corresponding 1968-69 means on the vocabulary subtest, but were significantly lower on the comprehension subtest. However, the 1969-70 group of sixth graders made significant gains from pre- to posttest on both subtests (see Table 4).

At the seventh grade level the 1969-70 posttest mean on the speed subtest of the Gates-MacGinitie Reading Tests was significantly higher than the corresponding 1968-69 mean. There were no statistically significant differences found between 1968-69 and 1969-70 posttest means on the accuracy, vocabulary, or comprehension subtests. Performance of the two groups was therefore comparable on these last three subtests.

Though no significant differences between the 1968-69 and 1969-70 posttest means were found at the ninth and tenth grade levels, the 1969-70 ninth grade posttest means on all the four subtests (speed, accuracy, vocabulary and comprehension) were somewhat higher



than the corresponding 1968-69 posttest means. The difference on the vocabulary subtest approached statistical significance.

The differences between the 1968-69 and 1969-70 posttest means of tenth graders were significant only on the speed and accuracy subtests (in favor of the 1969-70 group). The mean differences on the vocabulary and comprehension subtests were not statistically significant, indicating comparable final performance.

At the eleventh and twelfth grade level, there were no significant mean differences between the 1968-69 and 1969-70 groups on any of the four subtests of the Gates-MacGinitie Reading Tests. This finding indicates comparable posttest performance by both groups.

In general, the 1969-70 Title I students performed as well as their 1968-69 counterparts. Whereas fourth, fifth and sixth grade 1969-70 Title I means were somewhat lower than the corresponding 1968-69 means 1969-70 Title I students had generally higher means at the ninth, tenth, and eleventh grade levels (see Table 1).

Though these comparisons assume that the 1968-69 and 1969-70 Title I populations were comprised of different students, some students in the 1968-69 group may have been retained in the 1969-70 Title I Program. Retention of some students in the Title I Program for more than one year, however, does not necessarily suggest a different interpretation of the above results, especially if the same students took tests of different difficulty levels. More direct measures of the effectiveness of the Title I Program are the gains made by the students in any given school year from pretest to posttest; these are discussed in the next section.



#### III. Analyses of Pretest and Posttest Data

# A. Statewide Summary of Results by Grade Level

At the outset it should be mentioned that "statewide results" refer only to results for schools which had both pre- and posttest data available. Due to the late ordering of the tests, the unavailability of some tests at the time they were needed, and some problems in the administration of the tests, not all Title I schools were able to submit both pre- and posttest data for inclusion in the statewide analyses. Consequently, several of the statewide analyses by grade level were based on data from only a few schools and occasionally on the data of just one school. Thus, in judging the overall effectiveness of the Title I Program, other evaluative criteria should be used in addition to these "statewide results."

# 1. Metropolitan Readiness Tests (Grades Pre, K, 1)

At the preschool level, significant results were obtained on four of the six subtests of the Metropolitan Readiness Tests. The four subtests are word meaning, matching, numbers, and copying. On the total test, a significant (p < .01) mean gain (i.e., mean difference) of 6.42 was obtained from the pretest administered in January, 1970, to the posttest administered in May, 1970 (see Table 2). However, these results were based on data submitted by only two schools (viz., Waiahole El. and High School and Hanalei School), encompassing only 26 pupils.



Relative to the national norms, the preschool Title I pupils progressed from the 12th percentile to the 19th percentile. It should be noted, however, that the standardization group for the Metropolitan Readiness Tests consisted of children who were either finishing kindergarten or entering grade one. Furthermore, the "standardization group may be slightly superior to the national average with respect to median income and average schooling of adults in the communities" (Hildreth, Griffiths, & McGauvran, 1965, p. 15).

At the kindergarten level, the statewide analyses were based on data for 230 pupils from 22 schools. Significant gains were obtained on five of the six subtests (word meaning, matching, alphabet, numbers, and copying) of the Metropolitan Readiness Tests. The overall mean gain (mean difference) from pretest (January, 1970) to posttest (May, 1970) of 10.09 was significant beyond the p = .01 level of confidence (see Table 2). The progress from pretest to posttest was equivalent to an improvement from the 20th percentile to the 36th percentile, as measured against national norms. On the average, children scoring on the 36th percentile are "likely to succeed in first grade work" (Metropolitan Readiness Test Manual, 1965, p. 8). However, the Manual suggests that careful study should be made of specific strengths and weaknesses of individual pupils and their instruction planned accordingly.

At the first grade level, results of the analyses based on 522 cases from 35 schools revealed significant gains on all six subtests of the Metropolitan Readiness Tests, viz., word meaning, listening, matching,



alphabet, numbers, and copying. The total gain score of 8.52 was also significant ( $p \le .01$ ) (see Table 2). Using national norms, the total pretest and posttest mean scores were equivalent to the 56th and 65th percentiles, respectively. (The mean scores are reported here in percentile equivalents since the Metropolitan Readiness Test Manual does not have grade score equivalents for raw scores.)

# 2. Gates-MacGinitie Reading Tests (Grades 2-12)

At the second grade level, results of analyses based on data provided by 163 pupils from 18 schools showed significant gains (p ≤ .01) on both the vocabulary and comprehension subtests of the Gates-MacGinitie Reading Tests (see Table 3). For all analyses of the Gates-MacGinitie by grade level, the testing interval from pretest to posttest was approximately four months. Though these gains were statistically significant, by national standards, the Title I pupils included in these analyses progressed only from a pretest mean grade equivalent score of 1.4 (four months in the first grade) to the posttest mean grade equivalent of 1.6 (six months in the first grade) on the vocabulary subtest and from 1.5 to 1.6 grade equivalent scores on the comprehension subtest. (It should be noted that comparison of Title I educationally and culturally deprived children in Hawaii with the average children of the same grade level on the U.S. Mainland in terms of academic progress may be inappropriate.)

The results of analyses of third grade data on 128 cases from 17 schools showed significant gains on both the vocabulary and comprehension subtests of the Gates-MacGinitie Reading Tests (hereafter referred to as G-MacGRT). The results were significant beyond the  $p \leq .01$  level (see Table 3).



At the fourth grade level, there were 96 cases from 12 schools. Results of analyses of the data on these 96 pupils showed significant gains ( $p \le .01$ ) made from pre- to posttest on both the vocabulary and comprehension subtests of the G-MacGRT (see Table 4). Compared to the national norms these 96 pupils obtained grade scores of 2.8 and 3.0 for the pretest and posttest, respectively, on the vocabulary subtest and grade score equivalents of 2.6 for the pretest and 2.8 for the posttest on the comprehension subtest.

At the fifth grade level, significant results were also obtained on both the vocabulary and listening subtests of the G-MacGRT. The analyses were based on data from 91 pupils from 11 schools. Significant mean gain scores on both the vocabulary subtest ( $p \le .01$ ) and the comprehension subtest ( $p \le .05$ ) were found (see Table 4). The pretest and posttest mean scores were equivalent to grade scores of 3.3 and 3.4, respectively, on the vocabulary subtest and 2.9 and 3.0, respectively, on the comprehension subtest; this implies progress of only .1 grade compared to the national norms.

At the sixth grade level, using data on 94 pupils from 12 schools, mean gain scores on both the vocabulary and comprehension subtests were significant ( $p \le .01$ ) (see Table 4). Mean grade score progress on the vocabulary subtest was from 3.9 to 4.2 while that on the comprehension subtest was from 3.5 to 3.9.

At the seventh grade level, significant improvement was observed on the speed, accuracy, and comprehension subtests of the G-MacGRT, while students' performance on the vocabulary subtest remained



practically the same from pre- to posttest (see Table 5). These analyses were based on data from 150 cases in ten schools.

Compared to the national norms, the students' mean grade equivalent score progressed from 4.8 to 5.8 on the speed subtest, 4.4 to 4.9 on the accuracy subtest, and 3.6 to 4.1 on the comprehension subtest. On the vocabulary subtest, the pretest and posttest scores were equivalent to the grade scores of 4.4 and 4.2, respectively.

Analyses of the eighth grade statewide data were based on only 53 cases coming from seven schools. Mean differences between pretest and posttest mean scores were significant on three of the four subtests of the G-MacGRT, viz., speed, accuracy, and comprehension (see Table 5). No significant change was observed on the vocabulary subtest. Relative to the national grade norms, the students progressed from 4.8 to 7.0 on the speed subtest, 3.8 to 4.6 on the accuracy subtest, and 3.2 to 3.3 on the comprehension subtest, over the course of four months. Pretest and posttest mean chores on the vocabulary subtest were each equivalent to a grade score of 3.9.

At the ninth grade level, significant progress was observed only on the speed and accuracy subtest of the G-MacGRT. Pretest and posttest mean scores were 20.4 and 24.74 on the speed subtest, 17.17 and 21.23 on the vocabulary subtest, and 33.54 and 33.70 on the comprehension subtest (see Table 6). The analyses were based on data from 106 pupils in four schools. In terms of mean grade score equivalents, pre- and posttest mean scores were 6.3 and 8.1 on the speed subtest and 5.5 and 7.5 on the accuracy subtest. On the vocabulary and comprehension subtests, the grade scores remained at 5.0 and 4.8, respectively.



At the tenth grade level, significant improvement in performance was observed on the speed and accuracy subtests ( $p \le .01$ ). Pre- and posttest mean differences on both the vocabulary and comprehension subtests were not statistically significant (see Table 6). These analyses treated scores from only 58 pupils in two schools (Waialua High and Intermediate School and Konawaena High and Intermediate School). Grade score equivalents for pretest and posttest mean scores were 10.7 and 12.3 on the speed subtest, 8.0 and 9.8 on the accuracy subtest, 5.6 and 5.9 on the vocabulary subtest, and 4.5 and 4.3 on the comprehension subtest.

Analyses of eleventh grade statewide data were based on only 34 cases from three schools (Waianae High, Hilo High, and Konawaena High). Significant differences were not noted between pretest and posttest mean scores on any of the four subtests (see Table 6). Grade score equivalents for both pre- and posttest mean scores were 10.7 on the speed subtest, 8.6 on the accuracy subtest, and 6.6 on the vocabulary subtest. Mean grade scores on the comprehension subtest were 6.0 for the pretest and 5.8 for the posttest.

The twelfth grade data were furnished by only one school (Hilo High) with just 10 cases. Obviously, this school could not be regarded as representative of statewide Title I participating schools at this grade level. But since these were the only data available, they were analyzed under the statewide category. Significant improvement (p ≤ .05) was observed only on the speed subtest (see Table 6). Mean differences on the three other subtests were not significant. Grade score equivalences for pretest and postrest mean scores were 8.5 and 12.3 on the vocabulary



subtest, 8.0 and 9.2 on the accuracy subtest, 7.7 and 7.7 on the vocabulary subtest, and 6.6 and 6.6 on the comprehension subtest.

## 3. Stanford Achievement Test (Arithmetic Computation) (Grades 2-12)

Analyses using the Stanford Achievement Test (arithmetic computation) were based on few cases for each grade and thus were probably not representative of the numerical performance of Title I students statewide. Although these data have been analyzed statewide, generalization to the statewide population should probably not be made.

For grade two, pretest and posttest mean scores were 30.5 and 31.39, respectively. This gain of 0.89 was not statistically significant. The analysis was based on only 27 cases from two schools (Hauula and Keaukaha El.). In terms of equivalent grade scores, both pretest and posttest mean scores were equivalent to 1.6.

For grade three, the mean difference was not significant. The number of cases was extremely small (four), coming from just one school,

Keaukaha Elementary. The grade equivalent score for both pretest and posttest means was 1.8.

For the fourth grade level, a significant mean increase ( $p \le .01$ ) was found. Equivalent grade scores for pretest and posttest means were 3.0 and 3.6, respectively, a progress of .6 grade in four months according to national norms. There were, however, only 23 cases from two schools (Hauula and Keaukaha Elementary).

At the fifth grade level, the obtained mean increase of 2.38 (from 21 pupils in Hauula El. and Keaukaha Elementary) was not statistically significant. Equivalent grade scores for pretest and posttest means were 3.3 and 3.6, respectively.

Data for the sixth grade did not indicate a statistically significant



mean increase from pretest to posttest. Again, there were only nine pupils, all from Keaukaha Elementary. Pre- and posttest means were equivalent to grade scores of 4.9 and 5.3, respectively.

No data were available for seventh, and twelfth grades on the Arithmetic Computation subtest of the Stanford Achievement Test (SAT).

At the eighth grade level, analysis was based on just five cases from Konawaena High and Intermediate School. The obtained mean gain of 1.40 failed to reach statistical significance. By national norms, the pretest and posttest mean scores were equivalent to grade scores of 5.1 and 5.4, respectively.

All the statewide ninth grade data on 72 students also came from Konawaena High and Intermediate School. A statistically significant  $(p \le .05)$  gain was obtained from pretest to posttest. Grade score equivalents of pretest and posttest mean scores were 5.9 and 6.1, respectively.

### 4. School Attitude Inventory (Grades 4-12)

The School Attitude Inventory (SAI) is an instrument constructed by EDRAD to measure general attitude toward school. Its development is described in EDRAD's 1969 Final Report to DOE (EDRAD, 1969). Adoption of the SAI by DOE as a measure of attitude toward school was based on EDRAD's recommendation (EDRAD, 1969, p. 44).

Data for the SAI were analyzed initially in two sets, according to the length of the time interval occurring between the pretest and the posttest. One set of SAI data had a testing interval of approximately five months. After completion of these two analyses, the two sets of data were combined and analyzed as one set.



Results of the analysis of the first set of data (4-month testing interval), by grade level are shown in Table 8. Among the nine grade levels (grades 4-12) significant mean decreases from pretest to posttest were observed for grades seven, nine, and ten. The pretest mean for the seventh grade, for instance, was 129.29 with a standard deviation of 22.84. The posttest mean for the same grade was 125.35 with a standard deviation of 23.82. The difference between the pretest and posttest means of -3.94 was significant ( $p \le .05$ ) with 140 cases. The mean decreases obtained in the ninth and tenth grades were significant at the  $p \le .05$  level. The results for the rest of the grades were not statistically significant. Mean SAI scores increased for grades 11 and 12, but not significantly so.

Results of the analysis of the second set of data (5-month testing interval) are presented in Table 9. In this analysis, grades nine and ten showed statistically significant ( $p \le .05$ ) decreases in mean SAT score from pretest to posttest. Most of the other obtained mean differences were gains, but none were statistically significant.

Results of the analysis of combined data from both testing intervals are shown in Table 10. Significant decreases were found in grades seven (p  $\leq$  .05), nine (p  $\leq$  .01), and ten (p  $\leq$  .01). The mean differences obtained for the remaining grade levels were not statistically significant.

#### B. Comparison of Results of Individual Projects

Comparisons of various projects were based on the magnitude of significant mean differences between pretest and posttest mean scores.



These comparisons used both subtest scores and total test scores on each of the tests employed.

# 1. Metropolitan Readiness Tests (Grades Pre, K, and 1)

At the preschool level, only Waiahole, Hanalei, and Hana participated. (Data from Hana were not included in the statewide analyses since they were received late.) Waiahole had the most successful project in that it made the most significant gains on the word meaning, matching, and number subtests, as well as on the total test. Hanalei made a statistically significant gain only on the copying subtest, while Hana made no gains at all on five of the subtests used. In fact, significant decreases were noted on the word meaning, listening, matching, and copying subtests (see Tables 11-24).

At the kindergarten level, 23 schools submitted pre- and posttest data for analysis. (Data from one school were analyzed late and failed to be included in the statewide analyses.) Schools that achieved significant gains on the particular subtests are listed below according to the magnitude of the significant gains made. (When more than 10 schools made significant gains on a given subtest, only the 10 greatest gains are given.)

Word Meaning	Listening	Matching
1. Honaunau 2. Maili 3. Koloa	1. Paauilo 2. Maili 3. Kaahumanu	<ol> <li>Honaunau</li> <li>Faauilo</li> <li>Hookena</li> <li>Royal</li> <li>Keaukaha</li> <li>Laupahoehoe</li> <li>Maili</li> </ol>



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Alph	abet	Num	bers	Cop	ying	Tota	<u>1</u>
1.	Kula	1.	P <b>aauil</b> o	1.	Maili	1.	Paauilo
2.	Pa <b>a</b> ui <b>l</b> o	2.	Kaahumanu	2.	Paauilo	2.	Honaunau
3.	Koloa	3.	Laupahoehoe	3.	Ko <b>l</b> o <b>a</b>	3.	Maili
4.	Laie	4.	Lanakila	4.	Honaunau	4.	Ko <b>l</b> o <b>a</b>
5.	Laupahoehoe	5.	Ko <b>l</b> oa	5.	Ro <b>yal</b>	5.	Laupahoehoe
6.	Wah <b>iawa</b>	6.	Honaunau	6.	Likelike	6.	Kauluwela
7.	Kauluwela	7.	Kapiolani	7.	Kauluwela	7.	Kaahumanu
8.	Keaukaha		-	8.	Wahiawa	8.	Wah <b>iawa</b>
9.	Likelike			9.	K <b>api</b> o <b>lani</b>	9.	Likelike
10.	Kaahumanu					10.	Roy <b>al</b>

It should be noted that the above judgments were made on the basis of the statistical significance of the gains and not on the absolute value of the gains themselves. Sometimes a large mean gain using data from only a few subjects was not as statistically significant as a small mean gain with a large number of subjects. Thus, for example, on the matching subtest Kula made a higher mean gain (4.00) than Hookena (2.88) but the former's gain failed to reach statistical significance since there were only two cases involved (see Table 29). A much greater gain would be required to meet the criterion of statistical significance with a sample of only two. For other such cases, see Tables 25-38.

Most of the gains achieved were significant beyond what could be attributed to statistical regression--i.e., to prediction of posttest score from knowledge of pretest score alone. However, it should be remembered that the regression phenomenon itself is confounded with the treatment effect. A significant F-ratio obtained from an analysis of variance of simple linear regression simply indicates that a usefully valid prediction can be made from the pretest to the posttest. However, a significant F-ratio for the analysis of regression does not necessarily



imply gains or losses. It simply denotes that a high enough correlation, either positive or negative, exists between pretest and posttest scores to warrant a valid prediction of one from the other.

To be relatively assured that the observed gains were greater than what could be expected from the regression phenomenon alone (i.e., regression toward the mean), the following procedure was employed. The mean difference between actual posttest and predicted posttest scores, using pretest scores as the predictor was computed for each subtest in each school and tested against the null hypothesis, i.e., that the regressed mean difference was not significantly different from zero. This was done by dividing the regressed mean difference score for each school by the standard error of regressed scores (differences between actual and predicted scores) for all the subjects for each subtest.

Using the <u>t</u>-test results, mean differences which were significantly larger than those which could be expected from the regression effect alone are marked with a plus sign (+) or signs (++), depending on the level of their significance ( $p \le .05$ ) and  $p \le .01$ , respectively). For example, in Table 25, the mean difference score of 1.53 for Maili has two plus signs after it to indicate that it is significantly larger ( $p \le .01$ ) than what would be expected from the regression effects alone.

In some cases, such as that of Royal on the matching subtest (see Table 29), the gain of 2.62 was not significantly larger than what would be expected from regression alone. Nevertheless, such results were not discounted since, as mantioned above, regression toward the mean is, in the case of Title I projects, confounded with the treatment



effect. Greater confidence can be placed on the gains if the are significant by both the t-test and the regression test.

To continue, schools which made significant gains on the various subtests and on the total test at the first grade level are listed below.

Word Meaning		Lis	tening	Matc	Matching	
1.	Aiea	1.	Wahiawa	1.	Honaunau	
2.	Royal	2.	Kaha1uu	2.	Ben Parker	
3.	Maili	3.	Waialua	3.	Kah <b>a</b> luu	
4.	Holualoa	4.	Aiea	4.	Wailuku	
5.	Wailuku	5.	Maili	5.	Fern	
6.	Fern	6.	Ben Parker	6.	Aiea	
7.	Kalihi-kai	7.	<b>Holual</b> oa	7.	Waialua	
8.	Kauluwela			8.	Maili	
				9.	Kaiulani	
				10.	Kalihi-kai	

<u>Alph</u>	<u>abet</u>	Numb	ers	Copy	ing	Tota	1
1.	Pahoa	1.	Ben Parker	1.	Paauilo	1.	Ben Parker
2.	Wailuku	2.	Ho <b>naunau</b>	2.	Ben Parker	2.	Maili
3.	Ben Parker	3.	Maili	3.	Honaunau	3.	Ho <b>nauna</b> u
4.	Haleiwa	4.	Nanakuli	4.	Koloa	4.	Aiea
5.	Anuenue	5.	Kalihi-waena	5.	Kalihi-waena	5.	Wailuku
6.	Honaunau	6.	Kaew <b>ai</b>	6.	Maili	6.	Haleiwa
7.	Laupahoehoe	7.	Aiea	7.	Haleiwa	7.	Pahoa
8.	Maili	8.	Wailuku	8.	Kalihi-kai	8.	Kahaluu
9.	Waialua	9.	Haleiwa	9.	Kaiulani	9.	Fern
10.	Kaiulani	10.	Waialua	10.	Aiea	10.	Wahiawa

There were a total of 36 schools which participated in the Title I program at the first grade level. (Data from one school was not included in the statewide analyses due to late processing of the data.)

The results for these schools are shown in Tables 39-52.

## 2. Gates-MacGinitie Reading Tests (Grades 2-12)

The Gates-MacGinitie Reading Tests have two subtests, (viz., vocabulary and comprehension) for forms B and C and four subtests (viz., speed, accuracy, vocabulary, and comprehension) for forms D and E.



Form B was administered to second and third graders; Form C to fourth, fifth, and sixth graders; form D to seventh, eighth, and ninth graders; and form E to tenth, eleventh, and twelfth graders.

At the second grade level, the schools that made the most significant gains on the vocabulary and comprehension subtests are listed below.

#### Vocabulary

- 1. Kihei
- 2. Paauilo
- Kalaheo
- 4. Aiea
- 5. Laupahoehoe
- 6. Waihee
- 7. Kula
- 8. Holualoa
- 9. Maili

## Comprehension

- 1. Waihee
- 2. Laupahoehoe
- 3. Wailuku
- 4. Maili
- . Hookena

There were twenty participating schools at this grade level, but the rest of them did not make significant progress on either the vocabul sy or comprehension subtest (see Tables 53-56).

Of the 17 participating third grade classes those that made significant progress according to magnitude of the gains on the vocabulary and comprehension subtests are listed below.

### Vocabulary

- 1. Honaunau
- 2. Aiea
- 3. Holualoa
- 4. Wailuku
- 5. Waimea
- 6. Makaha

# Comprehension

- 1. Honaunau
- 2. Wailuku
- 3. Holualoa
- 4. Maili

The detailed results are found in Tables 57-60.

The most significant gains of the 13 fourth grade classes on the two subtests were achieved by:

## Vocabulary

- 1. Kapaa
- 2. Keaukaha

#### Comprehension

- 1. Waimea
- 2. Kapaa
- 3. Holualos

Results of the analyses of the data by subtest are presented more fully in Tables 61-64.

Of the 12 participating schools at the fifth grade level, only two obtained significant gains on the vocabulary subtest and only one on the comprehension subtest. These successful schools are listed below.

### Vocabulary

#### Comprehension

1. Halawa

1. Keaukaha

2. Kula

The generally nonsignificant gains could be largely due to the small number of cases involved in almost every project at this grade level. The results of the analyses are shown in Tables 65-68.

At the sixth grade level, three of the 11 participating schools made significant gains on the vocabulary subtest and four on the comprehension subtest.

## Vocabulary

# Comprehension

Aiea

1. Kilohana

Kapaa 2.

Halawa 2.

3. Halawa 3. Keaukaha Kapaa

For details of the results, see Tables 69-72.

Results for the seventh grade are found in Tables 73-80. Among the 10 participating schools those which showed gains on three of the four subtests are identified below. No seventh grade made significant gains on the vocabulary subtest.

## Speed

### Accuracy

### Comprehension

- 1. Kalaheo
- Holualoa 1.
- Honaunau

- 2. Holualoa
- 2. Honaunau 3. Konawaena

Hilo Int.

2. Waianae

Hilo Int.

3. Aiea

Holmaloa Wilo Int. Again, that many of the observed gains were not statistically significant may have been due in part to rather small sample sizes.

As in the seventh grade, vocabulary subtest gains in the eighth grade classes were not significant. Among the seven participating schools at the eighth grade level, those that obtained significant gains on the three other subtests are enumerated below (see Tables 81-88 for detailed results).

Speed	Accuracy	Comprehension
<ol> <li>Nanakuli</li> <li>Konawaena</li> <li>Waianae</li> </ol>	<ol> <li>Holualoa</li> <li>Honaunau</li> <li>Konawaena</li> </ol>	1. Holualoa 2. Waianaa

At the ninth grade level, only one school (Konawaena) made significant gains on both the speed and accuracy subtests. None of the six participating schools made significant progress on either the vocabulary or comprehension subtests (see Tables 89-96).

Only three schools had data at the tenth grade level. Those which made significant improvement on each of the four subtests are as follows:

Speed	Accuracy	Vocabulary	Comprehension
1. Konawaena	1. Hilo 2. Konawaena	<ol> <li>Kahuku</li> <li>Konawaena</li> </ol>	1. Konawaena

Details of the results are found in Tables 97-104.

At the eleventh grade level, three schools had data on all the four subtests and one other school had data only on the vocabulary and comprehension subtests. None of the gains were significant except the mean gain made by Konawaena on the accuracy subtest (see Tables 105-112).



At the twelfth grade level, only two schools were involved. The only statistically significant gain was made by Hilo High on the speed subtest (see Tables 113-120).

The criterion used in selecting the first ten (or less) schools was simply the relative magnitude of statistically significant gains. This does not necessarily mean that those selected schools scored <a href="https://does.org/highest">highest</a> on the posttest. For example, on the comprehension subtest (see Table 87) the Waianae eighth grade, with a posttest mean of only 16.00, was selected as a successful project, while the Honaunau eighth grade, with a posttest mean of 37.50 was not. This was in part due to the fact that the Honaunau sample involved only eight pupils.

At the upper grade levels, fewer schools obtained significant gains. This might not have been the case had it been possible to include all Title I project schools in the comparisons. Many schools could not be included in the comparative analyses because they had not obtained pretest data. The posttest data furnished by these schools were utilized only in the analyses comparing statewide 1968-69 posttest means with the corresponding 1969-70 posttest means.

## 3. Stanford Achievement Test (Grades 2-12)

It was not possible to compare schools by grade level on the Arithmetic Computation subtest of the Stanford Achievement Test because in some grades (3, 6, 8, 9, 10, and 11) only one school participated and in three grades (2, 4, 5) only two schools participated (see Table 64). There were no data for grades seven and 12.

Individual schools that made significant gains at the indicated grade level were: Keaukaha (grade 2); Keaukaha and Hauula (grade 3);



Keaukaha (grade 5); and Konawaena (grades 9, 10, and 11). These schools had indicated that one of their objectives was to improve arithmetic and quantitative performance as measured by a standardized test.

# 4. School Attitude Inventory (Grades 4-12)

The School Attitude Inventory (SAI) was administered to all students in grades 4 through 12 in projects which had improvement of attitude toward school as one of their objectives. Since the SAI was used for all grade levels mentioned above and since the number of cases was small for many of the schools the data were analyzed for purposes of this report, by school, not by grade level.

The results are subject to various interpretations. Among the 26 schools involved, only two made significant gains on the SAI from pretest to posttest: McKinley High School and Kalaheo School. Their gains were significant at the p  $\leq$  .05 and p  $\leq$  .01 levels, respectively. These results, along with those of all other schools, are found in Tables 122 and 123.

Some of the schools demonstrated statistically significant decreases from pre- to posttest. This indicates deterioration of attitude toward school over the course of the school year. If there is a general tendency for students to become less enthusiastic about school during the course of the school year (regardless of the type of program), perhaps a change in the SAI testing schedule would show that deterioration in attitude under Title I programs is less than that observed in normal school programs. Thus, instead of giving the SAI pretest and posttest in the fall and spring of the same school year, the SAI posttest might be administered at the same relative time in



the school year as the pretest, but in the <u>following</u> school year.

This should lead to more accurate assessment of the fifth objective.

It should be noted, however, that the posttest means on the SAI for grades four through eight were higher than the mean of the randomly selected 1968-69 Title I students who were used in the validation of the SAI. The means for grades four through eight of the 1969-70 Title I students ranged from 122.32 to 132.15 whereas the mean for the 1968-69 sample was only 119.17 (see Table 10 of this report and Table 63 of last year's final report). The means for grades 11 and 12 were about the same as that of the 1968-69 sample. Compared with the randomly selected 1968-69 Title I students who were tested also toward the end of the school year, the 1969-70 Title I groups did about equally well at two grade levels (11 and 12) and much better at five grade levels (4 through 8).

Except for grades nine and ten the rest of the grade levels' average scores were equal to or greater than four on the six-point SAI scale. A scale score of four is designated by the description "pretty much like me" for positive statements about school. The scale descriptions ranged from "not like me" (point one) to "very much like me" (point six). These descriptions are possible responses to items indicating an individual's general liking for school or school selected persons and activities (see EDRAD, 1969, for a more detailed description of the SAI items and scale). The general SAI responses of the 1969-70 Title I students indicate a general liking for school which may be described as "above average." (Title I participating schools should perhaps make more use of the SAI as an instrument for identifying individual students who are potential school dropouts.)

## 5. Outstanding Title I Projects

The 10 schools which made the greatest number of significant gains on the standardized tests, (MRT, G-MacGRT, and SAT where applicable) are listed by grade level below. The listing is not strictly rank ordered since each project had different numbers of participating classes at the various grade levels. For instance, some schools had four grades at the elementary level and others had three at the intermediate level. However, those schools which appear at the top of the list tended to have a greater number of significant gains at their respective grade levels than those at the bottom. The top 10 Title I projects are as follows:

- 1. Maili (grades K-3)
- 2. Wailuku (grades 1-3)
- 3. Konawaena (grades 7-11)
- 4. Holualoa (grades K-8)
- 5. Kapaa (grades 4,6)

- 6. Aiea Elem. (grades 1-6
- 7. Kapiolani (grades K-6)
- 8. Keaukaha (grades K-6)
- 9. Halawa (grades 4-6)
- 10. Hilo Inter. (grades 7-9)

For illustrative purposes the primary activities of several of the outstanding projects are described below. These descriptions may prove useful and informative to other projects in planning their future programs. The activities or services are briefly stated under each school, as reported by DOE (DOE official correspondence, Aug. 7, 1970).

#### Maili (grades K-3)

- "Attendance at class for reading and language, held in school, headed by project teacher, averaging one hour or less per day;
- 2. "Presence of nurse or health coordinator"

## Wailuku (grades 1-3)

 "Attendance at class for reading and language, held in school, headed by project teacher, averaging one hour or less per day;



2. "Full time educational assistant working with small groups or individual children"

## Konawaena High and Intermediate (grades 7-11)

- "Provision of materials and equipment in special education classes;
- 2. "ETV hookup, unspecified usage;
- 3. "Attendance counselor or aide;
- 4. "Students trained as helpers in TV and instructional materials center;
- 5. "Resource center (equipment, supplies, toys) for children and teachers."

## Kapiolani (grades K-6)

- "After school study center/library;
- "Full time educational assistant working with small groups or individual children;
- 3. "Counseling;
- 4. "Full time educational assistant working some with children, but more than half time on clerical, material production, study hall monitoring, etc.;
- 5. "Resource center (equipment, supplies, toys) for children and teachers;
- 6. "ETV hookup, unspecified usage."

### Halawa (grades 4-6)

 "Diagnosis of reading problems by task force or diagnostic team after referral of child from classroom and/or school;



- 2. "Attendance at class for reading/language, held in reading center, headed by project teacher, averaging one hour or less per day;
- 3. "Full time educational assistant working with small groups or individual children."



#### IV. Discussion

Interpretation of the findings of the foregoing analyses should be tempered by the knowledge that only about one-half of the data received from participating schools on the standardized tests contained pretest information. Results of the pretest-posttest analyses of the data received are therefore indicative of the performance of only about one-half of the Title I population in the State of Hawaii. All posttest data, including those without corresponding pretest data, were, however, utilized in the statewide posttest comparison between 1968-69 and 1969-70 Title I groups, by grade level, on the Metropolitan Readiness Tests and the Gates-MacGinitie Reading Tests. These comparisons show the posttest performance of the total Title I population this school year relative to the posttest performance of the 1968-69 and 1969-70 posttest-posttest comparisons are better indicators of the performance of the total Title I students.

As mentioned earlier the Metropolitan Readiness Tests (for grades Pre-1) and the Gates-MacGinitie Reading Tests (for grades 2-12) were administered to schools which indicated as their objectives one or more of the following: (1) to improve performance as measured by standardized tests (language arts), (2) to improve classroom performance in reading beyond usual expectations, and (3) to improve verbal functioning. Results of statewide analyses, by grade level, of 1969-70 pretest-posttest own and posttest-posttest comparisons, by grade level, between 1968-69 and 1969-70 Title I populations indicate that the above-mentioned objectives have been satisfactorally accorded.



Inspection of Tables 2-6 reveals that most gains were made in the lower grades. Three explanations, not mutually exclusive, are offered to account for this observation: (1) the particular remedial programs used with lower grade pupils were more effective than those used with upper grade students, (2) younger children are more receptive to external intervention designed to improve their academic performance, and (3) the tests were more suited for assessing instructional objectives in the lower grades.

The fourth objective of the Title I Program was to improve performance as measured by standardized tests (arithmetic and quantitative skills).

Analyses of the data relevant to this objective were based on only 206 pupils from three schools. Thus, results from these analyses are not generalizable to the quantitative performance of the whole Title I population.

Significant results were obtained at four out of nine grade levels (see Table 7). Thus, whether the fourth objective of the Title I Program was generally attained is not clear.

Analyses of SAI data should also be interpreted with caution since 661 students (about one-third of the total SAI respondents) were excluded from the statewide analyses, due to missing pretest or posttest data. Results of the analyses of available data, however, strongly suggest that the fifth objective of the Title I Program (viz., to improve attitude toward school) has not been met. There are a number of possible explanations for this apparent lack of improvement in attitude toward school. First, the remedial programs may not have been potent enough to modify Title I students' attitudes toward school. Second, the attitudes measured by the SAI may be too strong to be altered in the course of four or five months. Third, students probably have a stronger liking



for school at the beginning of the school year than toward the end (significant decreases in mean SAI scores were observed in the seventh, ninth, and tenth grade levels—see Table 10). If this is the case, the SAI pretest and posttests might better be administered in the fall of two consecutive school years. In summary, further investigation is needed to determine the reasons underlying this observed lack of improvement in attitude toward school by Title I students.

The most successful individual projects were identified in terms of the magnitude and number of significant gains made. There was, among the most successful projects, commonality in the types of activities or services they rendered to students. For instance, providing a special class for reading and language and establishing a resource center for children and teachers were mentioned by most of the first ten outstanding projects as part of the services they offered. Many of the top projects also reported hiring the services of either part-time or full-time educational assistants who worked with the children either individually or in small groups. It might be helpful to the less successful projects to obtain detailed accounts of the content and procedures used in some of the more successful projects; these contents and procedures might then be modified to suit their own project situations and goals.

Twenty-six projects had as one of their objectives the improvement of students' attitude toward school, yet only two schools (viz., McKinley High and Kalaheo Elementary) made significant mean gains on the SAI. In this regard, it is interesting to note that McKinley High School provided a special class for students with behavior and learning problems and Kalaheo Elementary School used counseling as a remedial procedure. Since none of the other 24 schools, in the state of Hawaii, made significant mean gains on the SAI, considering their total Title I students regardless

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of grade level, information relative to the content and procedures employed by McKinley and Kalaheo might wisely be disseminated to other interested project schools.



### V. Summary and Recommendations

Statewide analyses of available data indicate that the first three objectives of the Title I Program -- viz., (1) to improve performance as measured by standardized tests (language arts), (2) to improve classroom performance in reading beyond usual expectations, and (3) to improve verbal functioning--have been satisfactorily met. Regarding the fourth objectivesviz., to improve performance as measured by standardized tests (arithmetic and quantitative skills), the findings were inconclusive, since data were sent in by only three schools on 206 students and significant gains were made at only four out of nine grade levels. The fifth and last objectiveviz., to improve students' attitude toward school--was not generally attained. As mentioned previously, about a third of the SAI data sent in for pretest-posttest analyses could not be used, due to missing pretest and/or posttest scores. This fact somewhat tempers the generality of the conclusion regarding Title I students' attitude toward school. These findings should be supplemented by evaluation reports from the individual participating schools.

Comparison of the individual projects permitted identification of the 10 most successful projects in terms of number and magnitude of significant gains made. In an attempt to identify the most effective remedial programs, services and/or activities conducted by the majority of these more successful schools were briefly described.

For a more adequate evaluation of the total Title I Program in Hawali the following recommendations are presented for possible implementation in the next school year:



- (1) that the standardized tests be ordered much earlier and be administered early in the school year (i.e., by late September);
- (2) that the School Attitude Inventory (SAI) posttest be administered exactly a year after the protest, in order to control influences such as the general tendency for all students to become less enthusiastic about school as the school year progresses; and
- (3) that regional conferences be held with representatives from the more successful projects in order to disseminate the content and procedures adopted by these more effective projects.



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  1964.



APPENDIX



### SCHOOL ATTITUDE INVENTORY

N THE:			School:		
Grade:		<del></del>	Date:		
FNSTRUCTIONS:					
Fill out the Do this now.	e blanks abov	e with your n	name, grade, scho	ool, and toda	y's date.
On the follow you feel about how much each state the space provide	ut school. R atement is li	ead each stat ke you or not	30 statements alcoment very care: like you. The	fully, and th	en decide
This is not honestly so that better and help saffect your grade	your teacher you more with	s and counsel your problem	right or wrong a ors will be abloas. Your answers	e to understa	md you
EMARPHE 1					
I love school.					
			Pretty much like me		
you do not love a ment is slightly your answer. Man		quite like yo			
EXAMPLE 2					
I don't like play	ying in schoo	01.			
Not like me	Slightly like me	Somewhat like me	Pretty much	Quite like me	Very much

If you don't like playing in school, then your answer should be "very much like me." But if you like playing in school, your answer should be "not like me." If your answer is somewhere in-between, mark an "X" on the line above your answer. Do it now. And there any questions? If none, then turn the page over and begin.



1. I can work alone for a period of time.

Not	Slightly	Somewhat	Pretty much	Quite	Very much
like me	like me	like me	like me	like me	like me

2. I complete my work not finished the day before.

Not	Slightly	Somewhat	Pretty much	Quite	Very much
lika ma	like me	like me	like me	like me	like me

3. I do my school work most of the time.

Not	Slightly	Somewhat	Pretty much	Quite	Very much
like me	like me	like me	like me	like me	like me

4. I read without anybody telling me to.

Not	Slightly	Somewhat	Pretty much	Quite	Very much
like me	like me	like me	like me	like me	like me

5. I enjoy books, newspapers, and magazines.

Not	Slightly	Somewhat	Pretty much	Quite	Very much
like me	like me	like me	like me	like me	like me

6. I carry out my work until it is finished.

Not	Slightly	Somewhat	Pretty much	Quite	Very much
l <b>i</b> ke me	like me	like me	like me	like me	like me

7. When I study, I easily get bothered by things going on around me.

77.	014	La Isa	The Attention	ch Quite	Vores
No	or Sira	ghtly Somewha	t Pretty mu	cu darre	Very much
1ike	me like	e me like m	e like me	like me	like me

8. I know that I can do what the teacher wants me to do.

Not	Slightly	Somewhat	Pretty much	Quite	Very much
like me	1:'ke me	like me	like me	like me	like me

9. I am interested is the results of my work.

Not	Slightly	Somewhat	Pretty much	Quite	Very much
like me	like me	like me	like me	like me	like me

10. I stick with a job until finished.

Not	Slightly	Somewhat	Pretty much	Quite	Very much	128
like me	like me	like me	like me	like me	like me	Y O O



Quite like me Very much like me

139

Pretty much like me

11.	Т	like	most	οf	mv	teachers.
T T 0		TIVE	IIIO 3 L	O .	шу	ccachero.

		-				
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
12.	I don't feel					
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like ma
13.	I come to sch	ool almost e	very day when	there's school.		
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like me
14.	I do extra so	chool work.				
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like me
15.	I hate school	l.				
	Not	Slightly	Somewhat	Pretty much	Quite	Very revolu
	like me	like me	like me	like me	like me	like ne
16.	I get right o	lown to work	if I have stu	dying to do.		
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like me
17.	I usually get	my classwor	k in early.			
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like me
18.	In class I of	Eten look out	the window o	r at things around	the room.	
	Not	Slightly	Somewhat	Pretty much	Quite	very much
	like me	like me	like me	like me	like me	like me
19.	I find learn:	ing new thing	s interesting	•		
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like me
20.	I like to go	to school.				



Slightly like me

Not like me Sowowhat Like me

21	т	think	school	ic	fun.
		LIIIIIK	SCHOOL	TO	LULIO

	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like me
22.	I think school	ol work is not	t useful.			
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like me
23.	I would like	to leave sch	001.			
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	lika me	like me	like me	lik <b>e</b> me
24.	T am doing we	ell in school	•			
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	13 he me	like me	like me	like me
25.	It's nice to	be in school	•			
	Not	Slightly	Somewhat	Pretty much	Quite	Very system
	like me	like me	like me	like me	like me	like ma
26.	I think teach	her <b>s give u</b> s	too much work	•		
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	like me
27.	I think scho	ol is like a	prison or jai	1.		
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
	like me	like me	like me	like me	like me	lika ma
26.	I think teac	hers are not	interested in	me.		
			<del></del>		0.14	**
	Not like me	Slightly like me	Somewhat like me	Pretty much like me	Quite like me	Very much like me
29.	I think school	ol is importa	nt.			
	Not	Slightly	Somewhat	Pretty much like me	Quite like me	Very much like me
	like me	like me	like me	like me	TTKE IIIE	TIKE III
30.	School is not	t pleasant.				
	Not	Slightly	Somewhat	Pretty much	Quite	Very much
O.	like me	like me	like me	like me	like me	like me



List of Designated Code Numbers of 1969-70 Title I Projects

<u>H</u> c	nolulu District		Leeward District	<u>0</u>	entral District
Code No.	Project	Code No.	Project	Code No.	Project
101 102 103 104 105 107 108 109 110 111 112 113 114	Anuenue Fern Kaahumanu Kaewai Kaiulani Kalihi-kai Kalihi-waena Kauluwela Lanakila Likelike Linapuni Palolo Puuhale Royal	201 202 203 206 207 208 209 210	Nanaikapono Pre. Waianae Elem. Maili Elem. Nanaikapono Elem. Waianae Inter. Nanakuli Hi & Inter. Waianae Hi Makaha  Windward District Project	401 402 403 404 405 406 407 408 409	Halawa Elem. Waialua Elem. Aiea Elem. Wahiawa Haleiwa Elem. Aiea Inter. Waialua Hi & Inter. Aiea Hi St. Michael's
116 117 118 119 120 121 122 123 125	Central Inter. S.B. Dole Inter. Jarrett Inter. Kalakaua Inter. Washington Inter. W.R. Farrington Hi Kaimuki Hi McKinley Hi St. Anthony's	302 303 304 305 306 307 308 309 310	Hauula Kaaawa Elem. Kahaluu Kahuku Hi & Elem. Laie Blanche Pope Elem. Waiahole Elem. & Inter. Benjamin Parker Waimanalo Elem.		<u>Kauai District</u>
Code No.	Project	Code No.	Project	Code	Project
701 702 703 704 705 706 708 710 711 712 713	Hilo Hi Hilo Inter. Holualoa Elem. Honaunau Hookena Kapiolani Elem. Keaukaha Elem. Konawaena Hi & Inter. Laupahoehoe Hi & Elem. Naalehu Paauilo Elem. & Inter. Pahoa Hi & Elem.	602 603 604 605 607 609 610	Waihee Elem. Kula Elem. Kihei Sch. Paia Elem. Wailuku Elem. Kilohana Elem. Hana Hi & Elem.	501 502 503 504 505 506	Waimea Elem. Koloa Kapaa Elem. Kapaa Hi & Inter. Hanalei Kalaheo



Table 1

Analyses of Statewide Title I 1968-69 and 1969-70 Post-test
Data (Grades 1-12) on the Metropolitan Readiness
Tests and Gates-MacGinitie Reading Tests

			1968-69	9		1969-7	0	<u>z</u>
Grade	Test	N	Mean	SD	N	Mean	SD	ratio_
K	Metropolitan	319			340			
	Word meaning		6.880	2.560		6.700	2.610	0.894
	Listening		8.070	2.630		7.690	2.810	1 <b>.7</b> 93
	Matching		7.720	3.370		7.590	3.540	0.483
	Alphabet		8.410	4.880		9.290	4.990	<b>-2.</b> 288*
	Numbers		9.250	3.890		8.940	4.390	0.961
	Copying		5.310	3.830		4.650	3.720	2.242**
	Total		45.670	16.480		44.770	17.560	0.679
1	Metropolitan	391			594			
	Word meaning		8.310	2.420		7.670	2.380	4.088**
	Listening		9.630	2.640		9.650	2.590	-0.117
	Matching		10.630	2.690		10.490	2.770	0.790
	Alphabet		13.700	3.420		13.540	3.440	0.717
	Numbers		13.290	3.800		13.100	3.770	0.770
	Copying		8.250	3.000		7.910	3.100	1.717
	Total		63.770	12.510		62.300	12.300	1.816
2	Gates-Mac. Pr (B)	330			459			
	Vocabulary		17.020	7.380		17.100	8.360	-0.142
	Comprehension		9.660	4.780		9.650	5.710	0.027
3	Gates-Mac. Pr (B)	331			426			•
	Vocabulary		24.520	8.650		24.270	9.880	0.371
	Comprehension		13.510	6.940		14.330	7.570	-1.550
4	Gates-Mac. Pr (C)	200			297			
	Vocabulary		26.100	7.880		24.570	8.300	2.077*
	Comprehension		20.450	8.160		18.360	8.040	2.817**
5	Gates-Mac. Pr (C)	197			189			
	Vocabulary		32.190	7.870		28.720	8.780	4.083**
	Comprehension		26.640	9.220		22.450	8.430	4.663**
6	Gates-Mac. Pr (C)	152			180			
	Vocabulary		35.220	9.280		34.620	8.520	0.609
	Comprhension		31.200	9.390		2 <b>8.7</b> 80	10.460	2.220*
7	Gates-Mac. Sur (D)	239			301			
	Speed		17.760	7.320		19.110	7.860	-2.060*
	Accuracy		14.510	5.920		15.100	6.000	-1.143
	Vocabulary		23.720	8.500		22.720	7.930	1.399
	Comprehension		28.650	10.850		27.710	9.850	1.041
8	Gates-Mac. Sur (D)	175			<b>16</b> 8			
	<b>Spee</b> d		22.110	8.700		22.840	8.090	-0.805
	Accuracy		18.230	8.270		18.110	7.420	0.142
	Vocabulary		24.940	8.980		24.870	9.040	0.072
	Comprehension		314150	11.420		29.210	11.850	1.543
9	Gates-Mac. Sur (D)	133			176			
	Speed		22.930	9.130		23.900	8.340	-0.960
	Ac <b>cura</b> cy		18.380	8.050		19.880	8.040	-1,623



_			1968-69			1969-70		2
Grad		N	Mean	SD	N	Mean	SD	ratio_
K	Metropolitan	319			340			
	Wo <b>rd meanin</b> g		6.880	2,560		6.700	2.610	0.894
	Listening		8.070	2.630		7.690	2.810	1.793
	Matching		7.720	3.370		7.590	3.540	0.483
	Alphabet		8.410	4.880		9.290	4.990	-2.288*
	Numbers		9.250	3.890		8.940	4.390	0.961
	Copying		5.310	3.830		4.650	3.720	2.242**
	Total		45.670	16.480		44.770	17.560	0.679
1	Metropolitan	391			594			
	Word meaning	•	8.310	2,420		7.670	2.380	4.088*
	Listening		9.630	2.640		9.650	2.590	-0.117
	Matching		10.630	2.690		10.490	2.770	0.790
	Alphabet		13.700	3.420		13.540	3.440	0.717
	Numbers		13.700				3.770	0.717
				3,800		13.100		
	Copying		8.250	3.000		7.910	3.100	1.717
_	Total		63.770	12.510		62.300	12.300	1.816
2	Gates-Mac. Pr (B)	330			459			
	Vocabulary		17.020	7.380		17.100	8.360	-0.142
	Comprehension		9.660	4.780		9.650	5.710	0.027
3	Gates-Mac. Pr (B)	331			426			
	Vocabulary		24.520	8.650		24.270	9.880	0.371
	Comprehension		13.510	6.940		14.330	7.570	-1.550
4	Gates-Mac. Pr (C)	200			297			
•	Vocabulary	200	26.100	7.880		24.570	8.300	2.077*
	Comprehension		20.450	8.160		18.360	8.040	2.817**
5	Gates-Mac. Pr (C)	197	20.430	8.100	189	10.500	0.040	2.01/**
,	•	197	22 100	7 070	109	20 720	0 700	/ 0004
	Vocabulary		32.190	7.870		28.720	8.780	4.083
_	Comprehension		26.640	9.220		22.450	8.430	4.663*
6	Gates-Mac. Pr (C)	152			180			
	Vocabulary		35.220	9.280		34.620	8.520	0.609
	Comprhension		31.200	9.390		<b>28.</b> 780	10.460	2.220*
7	Gates-Mac. Sur (D)	239			301			
	<b>Sp</b> eed		1 <b>7.</b> 760	7.320		19.110	7.860	-2.060*
	Accuracy		14.510	5.920		15.100	6.000	-1.143
	Vocabulary		23.720	8.500		22.720	7.930	1.399
	Comprehension		28.650	10.850		27.710	9.850	1.041
8	Gates-Mac. Sur (D)	175			<b>16</b> 8	• ,		
_	Speed	1,5	22.110	8.700	200	22.840	8.090	-0.805
	Accuracy		18.230	8.270		18.110	7.420	0.142
	-							
	Vocabulary		24.940	8.980		24.870	9.040	0.072
^	Comprehension	100	31:150	11.420	176	29.210	11.850	1.543
9	Gates-Mac. Sur (D)	133			176			
	Speed		22.930	9.130		23.900	8.340	-0.960
	Accuracy		18.380	8.050		19.880	8.040	-1.623
	Vo <b>cabulary</b>		24.890	8.480		26.810	9.040	<b>-1.</b> 915
	Comprehension		30.710	11.630		32.280	11.780	-1.168
10	Gates-Mac. Sur (E)	160			84			
	Speed		17.920	8.060		21.460	7.850	-3.316**
	Accuracy		13.010	5.310		16.650	6.420	-4.457**
	Vocabulary		16.950	6.480		18.000	6.200	-1.237
	Comprehension		24.230	8.980		23.990	9.650	0.189
11	Gates-Mac. Sur (E)	118	24.230	0.900	53	23.770	7.030	0.109
	Speed	110	20 /20	9 2/0	,,	10 200	9 600	0.7/1
	=		20.420	8.240		19.380	8.600	0.741
	Accuracy		14.780	6.500		15.550	7.940	-0.619
	Vocabulary		19.020	7.180		19.530	5.030	-0.533
	Comprehension		26.140	10.070		28.090	10.740	-1.119
12	Gates-Mac. Sur (E)	139		_	23		_	
	<b>Sp</b> ee <b>d</b>		21.400	8.920		20.4700	7.490	0.403
	Accuracy		16.500	7.520		15.910	6.740	0.382
	Vocabulary		19.990	6.060		19.830	9.720	0.077
	Comprehension		28.570	8.380		28.960	12.070	-0.149

<sup>\*</sup>Significant at the .05 level
\*\*Significant at or beyond the .01 level



To The

Table 2 Analyses of Statewide Title I 1969-70 Pre-test and Post-test
Data (Grades Pre-1) on the Metropolitan
Readiness Tests

		PRE-	TEST	POST	-TEST			
		(01-19		(05-1)				
		(0	,	(05 2	- , ,	Mean	<b>d</b> f	
<u>Grade</u>	<u>Subtest</u>	Mean	<b>S</b> D	Mean	<b>S</b> D	D <b>i</b> f <b>f</b>	(N-1)	) t
Pre	Word meaning	6.15	1.80	7.88	1.63	1.73	25	3.54**
	Listening	8.96	2.03	8.31	2.26	-0.65	25	1.33
	Matching	4.85	2.15	6.31	1.89	1.46	25	2.82**
	Alphabet	4.35	2.21	5.00	2.55	0.65	25	0.99
	Numbers	5.85	2.48	8.35	3.51	2.50	25	3.57**
	Copying	0.92	1.60	1.62	2.30	0.69	25	2.46*
	Total	31.04	5.86	37.46	9.14	6.42	25	4.04**
K	Word meaning	6.17	2.52	6.97	2.79	0.80	229	4.55**
	Listening	8.08	2.67	8.05	2.90	-0.03	229	0.18
	Matching	6.10	3.31	8.00	3.66	1.90	229	9.57**
	Alphabet	6.36	4.77	9.98	5.15	3.62	229	15.45**
	Numbers	7.97	4.42	9.79	4.64	1.82	229	8.61**
	Copying	3.59	3.46	5.50	3.29	1.91	229	9.48**
	Total	38.20	16.06	48.29	18.59	10.09	229	16.37**
1	Word meaning	6.97	2.22	7.82	2.38	0.84	521	6.89**
	Listening	9.05	2.41	9.74	2.57	0.69	521	5.39**
	Matching	8.81	3.17	10.54	2.79	1.73	521	12.96**
	Alphabet	11.16	4.33	13.59	3.41	2.43	521	17.18**
	Numbers	11.13	3.88	13.02	3.74	1.89	521	12.83**
	Copying	6.89	3.42	7.90	3.13	1.01	521	7.13**
	Total	53.98	13.08	62.50	12.40	8.52	521	20.68**



<sup>\*</sup>Significant at the .05 level
\*\*Significant at or beyond the .01 level

Table 3

Analyses of Statewide Title I 1969-70 Pre-test and Post-test
Data (Grades 2-3) on the Gates-MacGinitie
Reading Tests (Primary B)

		PRE-TEST (01-19-70)			POST-TEST (05-11-70)		· · · · · · · · · · · · · · · · · · ·	
Grade	Subtest	Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
2	Vocab	13.48	7.23	18.08	8.13	4.60	162	9.25**
	Compre	9.01	5.09	10.75	5.68	1.74	162	4.08**
3	Vocab	20.97	9.64	24.49	10.10	3.52	127	7.32**
	Compre	13.10	6.68	15.15	7.59	2.05	127	4.63**

<sup>\*\*</sup>Significant at or beyond .01 level



Table 4 Analyses of Statewide Title I 1969-70 Pre-test and Post-test Data (Grades 4-6) on the Gates-MacGinitie Reading Tests (Primary C)

		PRE-TEST (01-19-70)		POST- (05-1)	TEST 1-70)	Maan	df	,	
Grade	Subtest	Mean	SD	Mean	SD	Mean Diff	(N-1)	t	
4	Vocab	25.29	7.73	27.05	8.14	1.76	95	3.96**	
	Compre	19.16	7.19	21.44	8.36	2.28	95	3.61**	
5	Vocab	29.59	7.97	31.27	9.08	1.68	90	3.16**	
	Compre	22.65	8.45	23.82	8.90	1.18	90	2.04*	
6	Vocab	35.18	8.05	36.95	8.29	1.77	93	3.92**	
	Compre	28.13	9.96	30.86	10.54	2.73	93	4.21**	



<sup>\*</sup>Significant at the .05 level
\*\*Significant at or beyond the .01 level

Table 5

Analyses of Statewide Title I 1969-70 Pre-test and Post-test
Data (Grades 7-9) on the Gates-MacGinitie
Reading Tests (Survey D)

		PRE-	TEST	FOST-	ra ar			=====
		(01-1		(05-1				
		•	-	•	•	Mean	df	
Grade	Subtest	Mean	SD	Mean	SD	Diff	(N-1)	t
7	Speed	16.35	6.75	19.09	7.99	2.75	149	4.20**
,	Accuracy	12.69	4.42	15.06	5.80	2.73	149	6.50**
						_		
	Vocab	23.52	7.25	22.73	7.73	-0.79	149	1.65
	Compre	24.51	8.56	28.25	9,50	3.74	149	6.27**
8	Speed	16.17	7.98	22.15	9.68	5.98	52	4.57**
	Accuracy	11.49	5.60	14.45	7.11	2.96	52	4.53**
	Vocab	19.94	8.87	19.87	9.65	-0.08	52	0.10
	Compre	20.53	11.53	22.94	11.99	2.42	52	2.52**
9	Speed	20.04	6.19	24.74	8.27	4.70	105	6.16**
-	Accuracy	17.17	6.29	21.23	8.19	4.06	105	8.04**
	Vocab	28.18	8.13	28.30	8.70	0.12	105	0.29
			10.19					
	Compre	33.54	10.19	33.70	11.59	0.16	105	0.26

<sup>\*\*</sup>Significant at or beyond the .01 level



Table 6 Analyses of Statewide Title I 1969-70 Pre-test and Post-test Data (Grades 10-12) on the Gates-MacGinitie Reading Tests (Survey E)

	(01-19-1)	-70)	(05-1	1-70)			
					Mean	df	
Subtest	Mean	SD	Mean	SD	Diff	(N-1)	t
Speed	19.34	9.33	23.91	7.46	4.57	57	3.36**
•	13.52	7.43	17.21	6.78	3.69	57	4.91**
Vocab	16.29	5.74	17.21	5.72	0.91	57	1.65
Compre	22.86	9.72	22.71	8.86	-0.16	57	0.18
Speed	19.29	9.35	19.12	8.92	-0.18	33	0.13
Accuracy	14.71	7.48	15.03	8.58	0.32	33	0.33
Vocab	19.47	5.94	18.94	5.27	-0.53	33	0.78
Compre	29.00	10.32	27.82	9.78	-1.18	33	0.94
Speed	16.00	7.24	20.80	8.34	4.80	9	2.38*
•	13.80	6.30	16,40	6.17	2.60	9	1.63
Vocab	22.00	9.88	21.70	10.34	-0.30	9	0.18
Compre	31.00	13.14	30.80	12.16	-0.20	9	0.10
	Speed Accuracy Vocab Compre Speed Accuracy Vocab Compre Speed Accuracy Vocab	Subtest Mean  Speed 19.34 Accuracy 13.52 Vocab 16.29 Compre 22.86  Speed 19.29 Accuracy 14.71 Vocab 19.47 Compre 29.00  Speed 16.00 Accuracy 13.80 Vocab 22.00	Speed       19.34       9.33         Accuracy       13.52       7.43         Vocab       16.29       5.74         Compre       22.86       9.72         Speed       19.29       9.35         Accuracy       14.71       7.48         Vocab       19.47       5.94         Compre       29.00       10.32         Speed       16.00       7.24         Accuracy       13.80       6.30         Vocab       22.00       9.88	Subtest       Mean       SD       Mean         Speed       19.34       9.33       23.91         Accuracy       13.52       7.43       17.21         Vocab       16.29       5.74       17.21         Compre       22.86       9.72       22.71         Speed       19.29       9.35       19.12         Accuracy       14.71       7.48       15.03         Vocab       19.47       5.94       18.94         Compre       29.00       10.32       27.82         Speed       16.00       7.24       20.80         Accuracy       13.80       6.30       16.40         Vocab       22.00       9.88       21.70	Subtest       Mean       SD       Mean       SD         Speed       19.34       9.33       23.91       7.46         Accuracy       13.52       7.43       17.21       6.78         Vocab       16.29       5.74       17.21       5.72         Compre       22.86       9.72       22.71       8.86         Speed       19.29       9.35       19.12       8.92         Accuracy       14.71       7.48       15.03       8.58         Vocab       19.47       5.94       18.94       5.27         Compre       29.00       10.32       27.82       9.78         Speed       16.00       7.24       20.80       8.34         Accuracy       13.80       6.30       16.40       6.17         Vocab       22.00       9.88       21.70       10.34	Subtest         Mean         SD         Mean         SD         Diff           Speed         19.34         9.33         23.91         7.46         4.57           Accuracy         13.52         7.43         17.21         6.78         3.69           Vocab         16.29         5.74         17.21         5.72         0.91           Compre         22.86         9.72         22.71         8.86         -0.16           Speed         19.29         9.35         19.12         8.92         -0.18           Accuracy         14.71         7.48         15.03         8.58         0.32           Vocab         19.47         5.94         18.94         5.27         -0.53           Compre         29.00         10.32         27.82         9.78         -1.18           Speed         16.00         7.24         20.80         8.34         4.80           Accuracy         13.80         6.30         16.40         6.17         2.60           Vocab         22.00         9.88         21.70         10.34         -0.30	Nean   SD   Mean   SD   Diff   (N-1)



<sup>\*</sup>Significant at the .05 level
\*\*Significant at or beyond the .01 level

Table 7 Analyses of Statewide Title I 1969-70 Pre-test and Post-test
Data (Grades 2-11) on the Stanford Achievement
Test (Arithmetic Computation Subtest)

	PRE-T (01-19		POST- (05-11				
Grade	Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
2	30.50	10.30	31.39	9.83	0.89	27	1.12
3	38.25	4.79	38.00	9.93	-0.25	3	0.08
4	27.05	12.37	33.23	13.74	6.18	21	2.83**
5	30.71	11.89	33.10	15.58	2.38	20	1.31
6	18.00	6.6 <b>5</b>	20.11	8.70	2.11	8	1.22
8	13.80	2.77	15.20	4.44	1.40	4	0.61
9	17.82	<b>6.7</b> 9	18.76	6.94	0.94	71	2.01*
10	12.00	5.53	13.48	5.96	1.48	43	2.95**
11	10.63	4.00	12.13	4.42	1.50	7	2.29*

<sup>\*</sup>Significant at the .U5 level \*\*Significant at or beyond the .O1 level

Table 8

Analyses of Statewide Title I 1969-70 Pre-test and Post-test
Data (Grades 4-12) on the School Attitude
Inventory (4-month interval)

	PRE-T	EST	POST-7	FEST	TESTI	NG INTER	/AL
	Mid-Nov	. 1969	Mid-March	1970	Fou		
					Mean	df	
Grade	Mean	SD	Mean	SD	Diff	(N-1)	t
4	134.11	17.35	133.00	16.00	-1.11	18	0.27
5	136.68	18.83	131.57	22.57	-5.11	27	1.96
6	128.67	25.25	127.22	24.36	-1.44	26	0.39
7	129.29	22.84	125,35	23.82	-3.94	139	2.30*
8	122.69	25.44	122.64	27.51	-0.05	119	0.03
9	124.44	14.89	118.33	17.67	-6.10	38	2.24*
10	119.04	22.61	114.78	24.70	-4.25	109	2.41*
11	115.01	23.32	117.75	22.75	2.74	102	1.62
12	119.44	19.75	19.76	22.89	0.32	62	0.13

<sup>\*</sup>Significant at the .05 level

Table 9

Analyses of Statewide Title I 1969-70 Pre-test and Post-test
Data (Grades 4-12) on the School Attitude
Inventory (5-month interval)

	PRE-TEST Mid-Nov. 1969		POST- Mid-Apri			TESTING INTERVAL Five Months			
Grade	Mean	SD	Mean	SD	Mean Diff	df (N-1)	t		
4	130.58	24.50	131.81	23.86	1.23	47	0.32		
5	128.41	27.78	128.59	20.43	0.18	48	0.05		
6	131.27	26.32	132.46	20.85	1.20	40	0.30		
7	125.85	21.74	124.85	25.51	-1.01	70	0.38		
8	120.04	22.07	120.96	23.52	0.93	27	0.21		
9	117.63	26.02	111.95	27.57	-5.68	120	2.84*		
10	118.51	19.98	108.08	26.20	-10.43	48	3.38*		
11	112.95	30.30	113.00	22.00	0.05	18	0.02		

<sup>\*</sup>Significant at the .05 level

Table 10 Analyses of Statewide Title I 1969-70 Pre-test and Post-test Data (Grades 4-12) on the School Attitude Inventory (Both testing intervals)

	PRE-TI		POST-T		AVERAGE TI		TERVAL
	Mid-Nov	. 1969	Mid-Apri	1 19/0	Mean	Months df	<del></del>
Grade	Mean	SD	Mean	SD	Diff	(N-1)	t
4	131.58	22.63	132.15	21.92	0.57	66	0.19
5	131.42	25.09	129.68	21.13	-1.74	76	0.65
6	130.24	25.74	130.38	22.29	0.15	67	0.05
7	128.13	22.49	125.18	24.34	-2.96	210	2.04*
8	122.19	24.79	122.32	26.73	0.14	147	0.09
9	119.29	23.93	113.51	26.61	-5.78	159	3.51**
10	118.87	21.77	112.72	25.28	-6.16	158	3.95**
11	114.69	24.41	117.01	22.61	2.32	121	1.54
12	119.72	19.75	119.61	22.74	-0.11	63	0.05

<sup>\*</sup>Significant at the .05 level
\*\*Significant at or beyond the .01 level

Table 11

Analyses of Preschool Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Metropolitan Readiness
Tests (Word Meaning Subtest)

SC	SCHOOL PRE-TEST (01-19-70)			POST- (05-1		<del></del>		
		Mean	SD	Mean	SD	Mean Diff	d <b>f</b> (N-1)	t
308	Waiahole	5.71	1.79	7.53	1.62	1.82	16	2.97**
505	Hanalei	7.00	1.58	8.56	1.51	1.56	8	1.83
610	Hana	7.40	1.78	3.90	2.08	-3.50	9	4.87**

Table 12

Analysis of Regression of Preschool Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Metropolitan Readiness Tests (Word Meaning Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	0.154	0.154	0.056
Residual	24	66.500	2.771	
Total	25	66.654		

<sup>\*\*</sup>Significant at or beyond the .01 level



Table 13

Analyses of Preschool Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Metropolitan Readiness
Tests (Listening Subtest)

		PRE-TEST POST-TEST (01-19-70) (05-11-70)							
	chool	Mean	SD	Mean	SD	Mean Diff	df (N-1)	t	
308	Waiahole	8.59	2.27	8.29	2.08	-0.29	16	0.50	
50 <b>5</b>	Hanale <b>i</b>	9.67	1.32	8.33	2.69	-1.33	8	1.51	
610	Hana	9.30	1.83	3.80	2.44	-5.50	9	6.60**	

Table 14

Analysis of Regression of Preschool Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Metropolitan Readiness Tests (Listening Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	12.803	12.803	2.678
Residual	24	114.735	4.781	
Total	25	127.539		

\*\*Significant at or beyond the .01 level



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Table 15

Analyses of Preschool Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Metropolitan Readiness
Tests (Matching Subtest)

S	CHOOL	PRE-T (01-19		POST- (05-1			=	
		Mean	SD	Mean	SD	Mean Diff	d.E (N-1)	t
308	Waiahole	4.00	1.27	5.76	1.92	1.76	16	2.92**
505	Hanalei	6.44	2.60	7.33	1.41	0.89	8	0.90
610	Hana	6.40	4.67	0.40	0.52	-6.00	9	4.22*

Table 16

Analysis of Regression of Preschool Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Metropolitan Readiness Tests (Matching Subtest)

Source	df	Sum of Square	Mean Square	F-ratio
Regression	1	2.010	2.010	0.551
Residual	24	87.528	3.647	
Total	25	89.539		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

Table 17

Analyses of Preschool Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Metropolitan Readiness
Tests (Alphabet Subtest)

SCHOOL		PRE-TEST (01-19-70)		) OST- (05-1	T-70)			***************************************
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
308	Waiahole	4.88	2.26	5.29	2.95	0.41	16	0.46
505	Hanalei	3.33	1.80	4.44	1.51	1.11	8	1.14
610	Hana	4.00	2.87	4.30	4.03	0.30	9	0.26

Analysis of Regression of Preschool Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Metropolitan Readiness Tests (Alphabet Subtest)

Table 18

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	0.008	0.008	0.001
Residual	24	161.992	6.750	
Total	25	162.000		



Table 19

Analyses of Preschool Title I 1969-70 Pre-test and Post-test
Data (Two Schools) on the Metropolitan Readiness
Tests (Numbers Subtest)

SCHOOL		PRE-T (01-19		POST- (05-1		Mean	df	
	<del></del>	Mean	SD	Mean	SD	Diff	(N-1)	t
308 Waia	hole	5.06	1.95	6.82	2.21	1.76	16	3.19**
505 Hana	ılei	7.33	2.78	11.22	3.80	3.89	8	2.28

Table 20

Analysis of Regression of Preschool Title I 1969-70 Pre-test and Post-test Data (Two Schools) on the Metropolitan Readiness Tests (Numbers Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	33.222	33.222	2.903
Residual	24	274.663	11.444	
Total	25	307.885		
Total	25	307.885		

<sup>\*\*</sup>Significant at or beyond the .01 level



Table 21

Analyses of Preschool Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Metropolitan Readiness
Tests (Copying Subtest)

School	PRE-TEST (01-19-70)		POST-TEST (05-11-70)		Mean	df	
	Mean	SD	Mean	SD	Diff	(N-1)	t
308 Waiahole	0.59	1.50	0.82	1.74	0.24	16	1.29
505 Hanalei	1.56	1.67	3.11	2.57	1.56++	8	2.33%
610 Hana	2.90	2.47	1.10	2.85	-1.80	9	3.52*

Table 22

Analysis of Regression of Preschool Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Metropolitan Readiness Tests (Copying Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	81.716	81.716	38.884***
Residual	24	50.437	2.102	
Total	25	132.154		

<sup>\*</sup>Significant at the .05 level \*\*Significant at or beyond the .01 level



Table 23 Analyses of Preschool Title I 1969-70 Pre-test and Post-test Data (Two Schools) on the Metropolitan Readiness
Tests (Total Score)

SCHOOL	PRE-TE (01-19-		POST-1 (05-11				
	Mean	SD	Mean	<b>S</b> D	Mean Diff	df (N-1)	t
308 Waiahole	28.76	5.70	34.53	7.67	5.76	16	3.60**
505 Hanalei	35.33	3.28	43.00	9.51	7.67	8	2.14

Table 24 Analysis of Regression of Preschool Title I 1969-70 Pre-test

and Post-test Data (Two Schools) on the Metropolitan Readiness Tests (Total Score)

Source	urce df Sum of Squares		Mean Square	F-ratio	
Regression	1	491.175	491.175	7.389*	
Residual	24	1595.290	66.470		
Total	25	2086.465			



<sup>\*</sup>Significant at the .05 level
\*\*Significant at or beyond the .01 level

Table 25

Analyses of Kindergarten Title I 1969-70 Pre-test and Post-test
Data (23 Schools) on the Metropolitan Readiness Tests
(Word Meaning Subtest)

	SCHCOL	PRE-T		POST-		-		
		(01-10	-70)	(05-1	1-70)			
					<u></u> .	Mean	df	
		Mean	SD	Mean	SD	Diff	(N-1)	t
101	Anuenue	2.60	1.07	3.20	1.48	0.60	9	0.97
103	Kaahumanu	6.35	1.93	6.40	1.23	0.05	19	0.09
105	Kaiulani	4.85	1.72	5.54	2.99	0.69	12	0.81
109	Kauluwela	5.14	1.35	6.43	3.99	1.29	6	1.01
110	Lanakila	5.91	2.17	6.55	2.70	0.64	10	0.61
111	Likelike	4.94	1.34	5.44	1.55	0.50	15	1.04
115	Royal	6.31	1.32	6.08	2.43	-0.23	12	0.31
203	Maili	8.21	1.87	9.74	2.23	1.53++	18	2.41*
206	Nanakuli El.	6.39	2.23	6.42	1.66	0.03	35	0.06
303	Kaaawa	4.00	0.00	7.50	0.71	3.50	1	7.00
306	Laie	4.70	1.57	5.30	2.67	0.60	9	0.57
310	Waimanalo	5.00	1.73	4.67	4.62	-0.33	2	0.20
404	Wahiawa	5.91	2.63	6.27	2.05	0.36	10	0.56
502	Koloa	8.93	2.76	10.34	2.69	1.41++	28	3.42**
603	Kula	5.50	2.12	6.00	2.83	0.50	1	1.00
703	Holualoa	6.00	4.24	9.50	3.54	3.50	1	7.00
704	Honaunau	4.50	1.07	8.25	1.28	3.75++	7	5.79**
705	Hookena	5.88	1.73	6.38	1.85	0.50	7	0.45
706	Kapiolani	5.71	1.94	6.18	1.85	0.46	27	0.98
708	Keaukaha	7.33	3.28	7.11	1.54	0.22	8	0.17
711	Laupaho <b>e</b> hoe	4.89	2.71	6.56	1.42	1,67	8	2.04
713	Paauilo	6.44	2.65	6.22	2.11	-0.22	8	0.20
714	Pahoa	5.67	0.52	6.00	1.90	0.33	5	0.44
						·		

Table 26

Analysis of Regression of Kindergarten Title I 1969-70 Pre-test and Post-test Data (23 Schools) on the Metropolitan Readiness Tests (Word Meaning Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	456.608	456.608	78.265**
Residual	228	1330.181	5.834	
Total	229	1786.789		

<sup>\*</sup>Significant at the .05 level





<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 27 Analyses of Kindergarten Title I 1969-70 Pre-test and Post-test Data (23 Schools) on the Metropolitan Readiness Tests (Listening Subtest)

S	CHOOL		TEST 9-70)		POST-TES (05-11-70			
		(01-1	y <b>-</b> /0)		(0)-11-/(	Mean	df	
		Mean	SD	Mean	SD	Diff	(N-1)	t
101	Anuenue	3,50	1.58	`2 <b>.</b> 50	2,42	-1.00	9	0,92
103	Kaahumanu	7.25	2.34	8.60	2.37	1.35++	19	2.74
105	Kaiulani	6.69	2.36	6.69	3.52	0.00	12	0,00
109	Kauluwela	7.71	2.43	7.57	2.99	-0.14	6	0.10
110	Lanakila	8.55	2.62	8.18	3.40	-0.36	10	0.30
111	Likelike	7.94	1.48	7.19	2.10	<b>~0.7</b> 5	15	1.13
115	Roya1	<b>7.1</b> 5	2.27	8.08	1.44	0.92	12	1.41
203	Maili	9.53	2.39	11.21	2.07	1.68++	18	2.37
206	Nanakuli El	8.33	1.84	7.19	2.33	-1.14	35	2.44
303	Kaaawa	6.50	2.12	6.50	0.71	0.00	1	0.00
306	Laie	10.47	1.78	9.26	2.38	-1.21	18	1.93
310	Waimanalo	8.67	1.15	7.67	1.53	-1.00	2	0.65
404	Wahiawa	7.18	2.60	6.64	2.11	-0.55	10	0.86
502	Koloa	10.28	2.55	10.66	1.65	0.38	28	0.72
603	Kula	11.00	0.00	9.00	2.83	-2.00	1	1.00
703	Holual <b>o</b> a	10.00	1.41	9.00	2.83	-1.00	1	0.33
704	Honaunau	7.50	2.83	8.25	2.25	0.75	7	0.94
705	Hookena	9.13	1.13	7.25	1.49	-1.88++	7	2.71
706	Kapiolani	<b>7.</b> 57	2.25	6.36	2.41	-1.21	27	2.33
708	Keaukaha	7.67	2.12	8.67	2.45	1.00	8	1.10
	Laupahoehoe	9.11	2.26	8.67	2.69	-0.44	8	0.49
	Paauilo	6.22	1.86	8.44	2.13	2.22++	8	4.26
714	Pahoa	8.83	2.32	7.67	2.34	-1.17	5	1.12

Table 28 Analysis of Regression of Kindergarten Title I 1969-70 Pre-test and Post-test Data (23 Schools) on the Metropolitan Readiness Tests (Listening Subtest)

Source	ce df Sum of		Mean Square	F-ratio	
Regression Residual	1 228	382.636 1543.841	382.636	56.509**	
Total	229	1926.477	6.771		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level HSignificant at or beyond the .01 level after correction for statistical regression.

Table 29

Analyses of Kindergarten Title I 1969-70 Pre-test and Post-test
Data (22 Schools) on the Metropolitan Readiness Tests
(Matching Subtest)

	SCHOOL	PRE-	TEST	POST-	TEST			
		(01-1	9-70)	(05-1	1~70)			
						Mean	df	
		Mean	SD	Mean	SD	Diff	(N-1)	t
101	Anuenue	2.90	2.51	3.40	3.63	0.50	9	0.86
103	Kaahumanu	7.40	2.91	8.70	2.72	1.30	19	1.86
109	Kauluwela	6.57	1.72	8.71	3.59	2.14	6	2.17
110	Lanaki]a	8.09	4.37	7.36	4.76	-0.73	10	0.84
111	Likelike	5.44	2.63	6.88	3.58	1.44	15	1.72
115	Roya1	4.92	2.53	7.54	2.70	2.62	12	4.87**
203	Maili	9.74	3.26	11.95	1.58	2.21++	18	3.81**
206	Nanakuli El.	6.14	2.00	7.50	2.65	1.36	35	2.51*
303	Kaaawa	7.00	2.83	4.50	4.95	-2.50	1	1.67
306	Laie	5.80	2.78	6.90	2.47	1.10	9	1.01
310	Waimanalo	7.33	3.51	10.00	2.00	2.67	2	1.44
404	Wahiawa	4.36	1.36	5.64	2.84	1.27	10	1.55
50 <b>2</b>	Koloa	9.62	2.51	11.28	2.09	1.66++	28	3.82**
603	Kula	3.50	0.71	7.50	4.95	4.00	1	1.00
703	Holualoa	7.00	1.41	11.00	1.41	4.00	1	4.00
704	Honaunau	4.88	3.52	11.13	2.59	6.25++	7	4.64**
705	Hookena	3.38	2.20	6.25	1.75	2.88	7	3.54**
706	Kapiolani	4.21	1.71	5.64	3.23	1.43	27	3.22**
708	Keaukaha	3.67	1.00	6.11	3.06	2.44	8	2.82*
711	Laupahoehoe	4.44	2.40	6.78	2.99	2.33	8	2.27*
713	Paauilo	4.00	1.73	8.67	2.35	4.67++	8	4.13**
714	Pahoa	5.00	1.79	6.67	2.88	1.67	5	0.97

Table 30

Analysis of Regression of Kindergarten Title I 1969-70 Pre-test and Post-test Data (22 Schools) on the Metropolitan Readiness Tests (Matching Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	1228.610	1228.610	152.457**
Residual	228	1837.390	8.059	
Total	229	3066.000		

<sup>\*</sup>Significant at the .05 level

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for statistical regression

Table 31

Analyses of Kindergarten Title I 1969-70 Pre-test and Post-test
Data (22 Schools) on the Metropolitan Readiness Tests
(Alphabet Subtest)

	SCHOOL		TEST	POST-				
		(o1-1	9-70)	(05-1	1-70)			
						Mean	df	
		Mean	SD	Mean	SD	Diff	(N-1)	t
			SD					
101	Anuenue	3.10	4.53	3.40	4.79	0.30	9	0.38
103	Kaahumanu	6.65	4.08	10.15	4.84	3.50	19	3.64**
109	Kauluwela	6.43	2.64	10.71	3.30	4.29++	6	3.67**
110	Lanakila	9.91	6.07	12.36	4.67	2.45	10	2.10
111	Likelike	4.00	2.13	7.81	3.78	3.81	15	4.47**
115	Royal	6.31	4.05	8.62	4.87	2.31	12	3.33**
203	Maili	13.63	2.54	15.84	0.50	2.21	18	3.81**
206	Nanakuli El.	5.61	2.89	8.58	3.82	2.97	35	4.09**
303	Kaaawa	7.00	2.83	7.00	7.07	0.00	1	0.00
306	Laie	2.10	2.60	7.10	3.87	5.00+	9	5.59**
310	Waimanalo	7.67	4.73	11.67	6.66	4.00	2	1.51
404	Wahiawa	5.00	4.47	9.36	4.70	4.36+	10	3.76**
502	Koloa	10.07	3.51	15.52	0.69	5.45++	28	8.66**
603	Kula	2.00	2.83	12.50	2.12	10.50++	1	21.00*
703	Holualoa	12.00	5.66	15.50	0.71	3.50	1	1.00
704	Honaunau	6.63	6.00	10.00	5.18	3.38	7	2.50*
705	Hookena	4.50	1.51	5.88	3.44	1.38	7	1.25
706	Kapiolani	3.25	2.68	6.39	3.87	3.14	27	5.76**
708	Keaukaha	3.00	2.50	7.22	4.84	4.22	8	3.83**
711	Laupahoehoe	6.11	3.59	10. <b>7</b> 8	3.19	4.67++	8	6.11**
713	Paauilo	2.11	2.15	10.33	3.46	8.22++	8	6.28**
714	Pahoa	4.33	1.63	7.33	5.85	3.00	5	1.53

Table 32

Analysis of Regression of Kindergarten Title I 1969-70 Pre-test and Post-test Data (22 Schools) on the Metropolitan Readiness Tests (Alphabet Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	3388.337	3388.337	287.130**
Residual	228	2690,558	11.801	
Total	229	6078.895		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for statistical regression

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 33

Analyses of Kindergarten Title I 1969-70 Pre-test and Post-test
Data (22 Schools) on the Metropolitan Readiness Tests
(Numbers Subsect)

	SCHOOL	PRE EST (01-19-70)		POST-(EST (05-11-70)		Mean	df	
		Maan	SD	Mean	SD_	·iff	(N-1)	t
101	Anuenue	4.80	3.79	<b>3.</b> 50	3.57	-1.30	9	1.14
103	Kaahumanu	6.70	2.75	9.65	2.23	2.95+	19	3.96**
109	Wauluwela	7.00	58 ئىد	9.57	2.70	2.57	6	1.97
110	Lanakila	11,36	5,66	14.09	5.01	2.73++	10	3.46**
111	Likelike	5,6 <b>3</b>	2.9 <b>0</b>	7.06	3.11	1.44	15	2.00
115	Roya1	7,69	5.31	8.85	4.47	1.15	12	0.82
203	Maili	13,47	4.93	14.53	3.49	1.05	18	1.68
206	Nanakuli El	€.92	2.26	7.11	2.75	0.19	35	0.36
303	≾aaawa	7 , 00	1.41	6.50	3.54	-0.50	1	0.33
306	Laie	6.40	<i>د</i> ,12	9.30	4.79	2.90	9	1.98
310	Waimanalo	6,00	£₄65	6.67	2.08	0.67	2	0.33
404	W <b>ahi</b> awa	6.27	2,69	8.45	3,36	2.18	10	1.91
50 <b>2</b>	Koloa	11.83	3,97	14.07	3.62	2.24++	28	5.16**
603	Kula	8,00	0.00	9.00	1.41	1.00	1	1.00
703	Holualoa	7,00	1.41	11.50	0.71	<b>4.50</b>	1	3.00
704	Honaunau	7,25	2.71	9.13	2.90	38	7	3.07*
<b>7</b> 05	Jooksa	<b>4</b> ,69	1.69	4.75	2.i9	0 <b>.75</b>	7	1.03
706	<b>Kapi</b> elani	5,25	2.55	6.79	3.17	1.54:-	27	2.56*
708	Keaukaha	8,00	3.08	3.44	2.60	0.44	8	0.61
711	Laupalioehoe	8.22	3.19	11.11	4.28	2.89++	8	3.00*
713	Paaui ".o	6.11	3.69	11.33	3.84	5.22++	8	5.39**
714	Pahoa	9.33	7.00	11.00	5.93	1.67	5	1.69

Table 34

Analysis of Regression of Kindergarten Title I 1969-70 Pre-test and Post-test Data (22 Schools) on the Metropolitan Readiness Tests (Numbers Subtest)

Source	df	Sum of Squares	Mean Squares	F-ratio
Regression	1	2785.793	2785.793	
Residual	228	2148.191	9.422	
Total	229	4933.984		

<sup>\*</sup>Significant at the .05 level

<sup>+</sup>Significant at the .05 level after convection for statistical regression



<sup>\*\*</sup>Significant at or beyond the .01 level

Table 35

Analyses of Kindergarten Title I 1969-70 Pre-test and Post-test
Data (22 Schools) on the Metropolitan Readiness Tests
(Copying Subtest)

	SCHOOL	PRE-TI		POST-TI				
		(01-19-	-70)	(05-11-	-/0)	Mean	df	
		Mean	SD	Mean	SD	Diff	(N-1)	t
101	Anuenue	1.60	2.99	1.70	2.26	0.10	9	0.18
103	Kaahumanu	3.30	2.79	2.55	2.24	-0.75	19	1.49
109	Kauluwela	2.57	1.81	4.43	2.37	1.86	6	4.04**
110	Lanakila	6.45	2.46	5.27	1.95	-1.18	10	3.13**
111	Likelike	4.63	3.96	6.63	3.96	2.00+	15	3.20**
115	Royal	1.92	2.14	4.00	2.35	2.08	12	3.71**
203	Ma <b>i</b> li	3.00	3.06	9.79	2.12	6.79++	18	10.08**
206	Nanakuli El	1.22	1.31	2.39	1.57	1.17	35	5.49**
303	Kaaawa	2.50	3,54	3.50	4.95	1.00	1	1.00
306	Laie	1.10	1.60	1.90	2.18	0.80	9	1.81
310	Waimanalo	5.33	4.16	4.67	1.15	-0.67	2	0.38
404	Wahia <b>w</b> a	0.82	0.98	2.64	1.21	1.82	10	4.54**
502	Koloa	7.14	4.03	10.14	3.94	3.00++	28	4.53**
603	Kula	10.00	0.00	9.50	0.71	-0.50	1	1.00
703	Holualoa	4.50	3.54	5.00	4.24	0.50	1	1.00
704	Honaunau	4.25	2.43	7.13	1.96	2.88++	7	3.21**
<b>7</b> 05	Hookena	10.78	2.33	11.56	2.01	0 <b>.7</b> 8	8	1.36
706	Kap <b>i</b> ol <b>a</b> ni	1.61	2.01	3 <b>.2</b> 5	3.01	1.64	27	4.38**
<b>7</b> 08	Keaukaha	4.56	2.70	5.11	2.67	0.56	8	0.60
711	Laupahoehoe	5.11	4.20	7.89	3.10	2.78	8	2.12
<b>71</b> 3	Pa <b>aui</b> lo	2.67	2.00	5.89	3.02	3.22++	8	4.87**
<b>7</b> 14	Pahoa	2.17	3 <b>.2</b> 5	3.00	2.10	0.83	5	1.39

Table 36

Analysis of Regression of Kindergarten Title I 1969-70 Pre-test and Post-test Data (22 Schools) on the Metropolitan Readiness Tests (Copying Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio**
Regression	1	1550.766	1550.766	179,049**
Residual	228	1974.734	8.661	
Total	229	3525.500		

<sup>\*\*</sup>Significant at or beyond the .01 level





<sup>+</sup> Significant at the .05 level after correction for

statistical regression

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 37

Analyses of Kindergarten Title I 1969-70 Pre-test and Post-test
Data (22 Schools) on the Metropolitan Readiness Tests
(Total Score)

	SCHOOL	PRE-T			POST-TEST			
		<b>(</b> 01 <b>-</b> 19	<b>-</b> 70)	•	(05-11-7		1.0	
					22	Mean	df	4.
	<del></del>	Mean	SD	Mean	SD	Diff	(N-1)	t
101	Anuenue	18.50	12.19	17.70	15.30	~0.80	9	0.32
103	Kaahumanu	35,60	12.98	46.05	10.28	10.45	19	3.91**
105	Kaiulani	11.54	3.64	26.15	15.08	14.62 <sup>&amp;</sup>	12	3.70**
109	Kauluwela	35,43	10,00	47.43	15.28	12.00++	6	2.98*
110	Lanakila	50.27	19.65	53.82	16.18	3.55	10	1.39
111	Likelike	31.81	12.22	40.88	11.77	9.06	15	3.95*
115	Royal	34.31	14.50	43.15	14.78	8.85	12	2.80*
203	Maili	5 <b>7.47</b>	9.30	73.74	7.44	16.26 <del>++</del>	18	10.74*
206	Nanakuli El	34.61	6.46	39.19	8.99	4.58	35	3.12**
303	Kaaawa	34.00	12.73	35.50	20.51	1.50	1	0.27
306	Laie	28.60	13.43	36.90	13.25	8.30	9	2.05
310	Waimanalo	38.6 <b>7</b>	9.81	45.33	15.04	6.67	2	1.54
404	Wahiawa	29.55	9.51	39.00	10.04	9.45	10	3.86*
502	Koloa	5 <b>7.</b> 86	13.15	72.00	7.60	14.14+-	<b>2</b> 8	8.82**
603	Kula	40.00	5.66	53.50	4.95	13.50	1	1.80
<b>7</b> 03	Holualoa	46.50	14.85	61.50	12.02	15.00	1	<b>7.</b> 50
704	Honaunau	35.00	13.77	53.88	11.81	18.88 <del>\+</del>	7	8.20*
<b>7</b> 05	Hookena	63 <b>.7</b> 8	10.18	65.33	11,94	1.56	8	0.90
706	Kapiolani	27.61	<b>7.</b> 5 <b>3</b>	34.61	11.59	7.00	27	5.09**
<b>7</b> 08	Keaukaha	34.22	11.61	42.67	13.74	8.44	8	3.15
711	Laupahoehoe	37.89	13.02	51 <b>.7</b> 8	14.58	13.89 <del>1+</del>	8	6.71*
713	Paauilo	27.56	10.83	49.67	10.4	22.11++	8	8.28*
714	Pahoa	35.33	9.54	41.67	16.68	6.33	5	1.62

Table 38

Analysis of Regression of Kindergarten Title I 1969-70 Pre-test and Post-test Data (22 Schools) on the Metropolitan Readiness Tests (Total Score)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	59 <b>14</b> 0.816	59140.816	674.195**
Residual	<b>22</b> 8	20000.309	87.721	
Total	229	<b>7</b> 9141 <b>.</b> 125		

<sup>\*</sup>Significant at the .05 level





<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

<sup>&</sup>amp;Total mean gain score based on two subtests only

Table 39 Analysis of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Word Meaning Subtest)

	SCHOOL SCHOOL		TEST	POST-				
		(01-1	9-70)	(05-1	1-70)			
					_	Mean	df	
	<del></del>	Mean	SD	Mean	SD	Diff	(N-1)	<u>t</u>
101	Anuenue	6.00	1.41	7.11	1.62	1.11++	8	1.70
102	Fern	5.44	2.60	7.22	1.99	1.78	8	2.40*
103	Kaahumanu	8.57	1.95	9.04	1.87	0.48	22	0.92
104	Kaewai	6.21	1.82	6.08	2.14	-0.13	37	0.34
105	Kaiulani	6.97	1.76	6.86	1.85	-0.10	28	0.21
107	Kalihi-kai	6.52	2.14	8.22	2.42	1.70++	26	2.63*
108	Kalihi-waena	6.71	2.14	6.57	1.72	-0.14	6	0.26
109	Kaluwela	7.11	1.54	8.78	2.39	1.67++	8	2.29*
111	Likelike	5.62	1.69	6.10	1.76	0.48	20	1.16
112	Linapuni	6.46	2.66	7.57	1.97	1.11	27	2.13*
115	Roya1	7.00	1.83	10.50	2.65	3.50++	3	7.00*
203	Maili	6.56	2.04	9.78	2.16	3.22++	17	5.55*
206	Nanakuli El.	5.66	2.00	6.28	1.89	0.62	28	1.21
210	Makaha	5.53	2.25	6.47	2.63	0.95	18	1.34
302	Hauula	6.48	1.94	6.97	1.90	0.48	<b>2</b> 8	0.92
303	Kaaawa	7.43	1.62	7.57	2.64	0.14	6	0.13
304	Kaha luu	6.30	2.45	8.00	2.16	1.70	9	1.95
306	Laie	8.89	2.08	7.06	2.46	-1.83++	17	2.71*
309	Ben Parker	8.08	2.00	7.96	1.73	-0.13	23	0.25
310	Waimanalo	6.00	2.00	6.33	0.58	0.33	2	0.28
402	Waialua	7.60	1.96	7.30	2.31	-0.30	9	0.42
403	Aiea	6.12	1.90	12.00	2.32	5.88++	16	11.45*
404	Wahiawa	7.75	2.22	8.58	2.15	0.83	11	1.70
405	Haliewa	6.93	2.74	6.67	2.32	-0.27	14	0.40
502	Koloa	7.16	2.22	7.79	2.46	0.63	18	1.03
5 <b>03</b>	Kula	7.93	1.77	8.36	2.56	0.43	13	0.70
507	Wailuku	5.22	2.05	7.33	2.12	2.11	8	2.46*
703	Holualoa	8.06	2.21	10.38	3.03	2.31++	15	3.31*
704	Honaunau	6.00	1.58	7.11	1.36	1.11	8	1.55
705	Hookena	7.56	1.94	8.00	1.73	0.44	8	0.69
70 <b>6</b>	Kapiolani	7.65	2.06	7.50	1.70	-0.15	19	0.29
708	Keaukaha	7.60	3.58	8.40	2.41	0.80	4	0.83
711	Laupahoehoe	6.53	2.36	7.80	1.86	1.27	14	1.81
712	Naalehu	8.71	1.98	8.29	2.30	-0.43	13	0.69
713	Paauilo	7.75	3.30	7.75	1.50	0.00	3	0.00
714	Pahoa	6.80	1.10	8.80	1.79	2.00	4	1.69

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level ++Significant at or beyond the .01 level after correction for statistical regression

Table 40

Analysis of Regression of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Word Meaning Subtest)

Source	df	Sum of Squares	Mean Squares	F-ratio
Regression	1	200.840	200.840	37.929**
Residual	520	2753.508	5.295	
Total	521	2954.348		

<sup>\*\*</sup>Significant at or beyond the .01 level



Table 41 Analyses of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Listening Subtest)

	SCHOOL			OOL PRE-TEST POST- (01-19-70) (05-1				
		(01-19	-70)	(05-1	1-70)	Mean	df	
		Mean	SD	Mean	SD_	Diff	(N-1)	t
101	Anuenue	7.44	2.01	7.44	2.70	0.00	8	0.00
102	Fern	7.6?	2.29	8.44	2.19	0.78	8	0.71
103	Kaahumanu	9.13	2.65	10.48	2.91	1.35	22	1.95
104	Kaewai	8.45	2.54	9.37	3.25	0.92	37	1.49
105	Kaiulani	9.14	2.39	8.24	2.85	-0.90	28	1.36
107	Kalihi-kai	8.78	2.36	9.59	2.26	0.81	26	1.54
108	Kalihi-waena	9.57	3.26	10.14	1.57	0.57	6	0.62
109	Kaluwela	9.78	2.77	10.22	2.64	0.44	8	0.36
111	Likelike	8.19	1.91	8.38	<b>2.5</b> 8	0.19	20	0.33
112	Linapuni	9.46	2.20	9.07	2.39	-0.39	27	0.89
115	Royal	9.50	2.65	10.75	2.75	1.25	3	1.00
203	Maili	8.83	2.41	10.61	2.33	1.78++	17	3.29%
206	Nanakuli El	8.07	1.98	8.86	2.39	0.79	<b>2</b> 8	1.77
210	Makaha	7.37	2.79	7.63	3.47	0.26	18	0.23
302	Hauula	9.03	2.28	.9 <b>.83</b>	2.69	0.79	28	1.58
303	Kaaawa	10.14	1.07	8.14	1.68	-2.00+4-	6	3.06*
304	Kahaluu	8.40	1.65	10.70	1.89	2.30	9	2.91*
306	Laie	10.44	1.82	9.22	2.44	-1.22	17	1.84
309	Ben Parker	8.63	2.68	10.38	2.62	1.75++	23	2.99*
310	Waimanalo	9.00	2.00	9.67	0.58	0.67	2	0.46
402	Waialua	6.50	2.64	8.60	3.27	2.10	9	2.64*
403	Aiea	8.12	2.23	9.94	2.08	1.82++	16	2.26*
404	Wahiawa	9.17	1.80	11.92	2.07	2.75++	11	3.94*
405	Haleiwa	8.87	1.55	9.20	2.21	0.33	14	0.49
502	Koloa	11.00	1.91	10.63	3.04	-0.37	18	0.71
603	Kula	9.43	1.70	10.14	1.46	0.71	13	1.16
607	Wailuku	7.33	2.06	8.33	2.18	1.00	8	8.93
703	Holualoa	10.31	2.60	11.75	2.18	1.44++	15	2.79%
704	Honaunau	9.00	2.00	<b>7.</b> 78	2.11	-1.22	8	1.28
705	Hookena	10.56	1.94	11.44	2.24	0.89	8	1.00
706	Kapiolani	8.80	2.24	9.65	1.76	0.85	19	1.92
708	Keaukaha	12.00	1.58	11.40	2.30	~0.60	4	0.42
711	Laupahoehoe	9.73	1.71	10.13	1.64	0.40	14	0.69
712	Naalehu	11.36	1.95	11.71	1.59	0.36	13	0.70
713	Paauilo	9.75	1.26	11.75	1.71	2.00	3	1.41
714	Pahoa	7.80	0.84	10.60	2.30	2.80	4	2.42

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

→+Significant at or beyond the .01 level after correction for statistical regression

Table 42

Analysis of Regression of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Listening Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	. 336.835	336.835	56.207
Residual	520	3116.227	5 <b>.9</b> 93	
Total	521	3453.063		

\*\*Significant at or beyond the .01 level

Table 43

Analyses of First Grade Title I 1969-70 Pre-test and Post-test
Data (36 Schools) on the Metropolitan Readiness Tests
(Matching Subtest)

	SCHOOL		TEST	POST-				
		(01-1	9 <b>-7</b> 0)	(05 <b>-</b> 1	1-70)	<b>M</b>	1 C	
		Mean _	SD	Mean	SD	Mean Diff	df (N-1)	t
	<del></del>	ngun		770011			(11, 1	
10 <b>1</b>	Anuenue	9.98	3.59	9 <b>.7</b> 8	3.96	-0.11	8	0.14
102	Fern	8.00	2.65	11.44	1.51	3.44++	8	4.30*
103	Kaahumanu	10.78	2.97	11.87	2.44	1.09	22	1.80
104	Kaewai	8.63	2.73	10.08	3.03	1.45	3 <b>7</b>	2.64*
105	Kaiulani	8.00	3.56	10.17	3.87	2.17	28	4.31*
107	Kalihi-kai	9.93	2.51	12.00	1.88	2.07++	26	7.22*
108	Kalihi-waena	9.57	2.94	9,86	3.13	0.29	6	0.31
109	Kaluwela	<b>11.7</b> 8	1.48	10.89	1.90	-0.89	8	1.24
111	Likelike	8.90	2.90	10.48	1.91	1.5 <b>7</b>	20	2.69*
112	Linapuni	10.00	2.52	11.46	2.28	1.46+	27	3.93*
115	Roya1	9 <b>.7</b> 5	2.63	11.75	1.89	2.00	3	1.36
203	Maili	7.67	2.66	10.06	2.34	2.39	17	4.72%
206	Nanakuli El.	9.00	2.83	10.45	1.96	1,45	28	3.08*
210	Makaha	5.53	4.38	6.68	4.36	1.16	18	0.98
302	Hauula	9,48	2.82	10.45	2.61	0.97	28	1.90
303	Kaaawa	9.5 <b>7</b>	1.27	9.14	2.27	-0.43	6	0.51
304	Kaha luu	6.40	3.31	10.90	2.51	4.50++	9	3.58*
306	Laie	9.83	2.01	10.83	2.07	1.00	17	1.82
309	Ben Parker	6.54	3.72	11.25	1.94	4.71++	23	6.98%
310	Waimanalo	7.67	2.52	7.00	4.36	-0.67	2	0.23
402	Waialua	7.90	3.00	10.50	1.51	2.60+	9	3.07*
403	Aiea	10.12	2.47	12.94	1.48	2.82++	16	5.40*
404	Wahiawa	9.08	2.91	10.33	3.31	1.25	11	1.74
405	Haleiwa	7.13	3.34	9.07	4.15	1.93	14	1.71
502	Koloa	10.74	2.51	12.26	1.41	1.53++	18	3.62*
603	Kula	9.50	2.82	10.79	3.19	1.29	13	1.35
60 <b>7</b>	Wailuku	7.22	3.60	11.11	1.05	3.89++	8	2.91*
<b>7</b> 03	Holualoa	9.44	1.82	10 <b>.7</b> 5	2.74	1.31	15	1.66
<b>7</b> 04	Honaunau	4.00	2.45	9.11	4.5 <b>7</b>	5.11++	8	4.60%
<b>7</b> 05	Hookena	9 <b>.67</b>	1.80	9.89	1.45	0.22	8	0.41
<b>7</b> 06	Kapiolani	8.35	2.32	8.80	2.46	0.45	19	0.61
<b>7</b> 08	Keaukaha	9.80	2.28	9.80	4.21	0.00	4	0.00
711	Laupahoehoe	8.73	3.31	10.47	1.73	1.73	14	3.03*
712	Naa lehu	11.21	1.85	9 <b>.</b> 5 <b>7</b>	2.53	-1.64++	13	3.23*
713	Paauilo	<b>7.7</b> 5	2.99	9 <b>.7</b> 5	1.26	2.00	3	1.26
714	Pahoa	6.20	3.70	9.40	2.97	3.20	4	2.58

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for statistical regression

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 44

Analysis of Regression of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Matching Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	954.354	954.354	159.713**
Residual	<b>52</b> 0	3107.225	5.975	
Total	5 <b>21</b>	4061.578		

\*\*Significant at or beyond the .01 level

Table 45 Analyses of First Grade Title I 1969-70 Pre-test and Post-test (36 Schools) on the Metropolitan Readiness Tests (Alphabet Subtest)

	SCHOOL		TEST	POST-	TEST			
		(01-1	.9 <b>-</b> 70)	(05-1	1-70)			
						Mean	df	
		Mean	SD	<u>Mean</u>	<b>S</b> D	Diff	(N-1)	t_
101	Anuenue	8.44	4.50	12,78	4.68	4.33++	8	3.96%
102	Fern	13.33	2.92	15.11	1.54	1.78	8	1.92
103	Kaahumanu	13.17	2.72	15,48	0.59	2.30++	22	4.40*
104	Kaewai	10.32	4.10	12.97	4.35	2.66+	37	3.85%
105	Kaiulani	8.76	4.97	11.52	5.23	2.76	28	3.96*
107	Kalihi-kai	13.07	3.16	14.74	1.61	1.67	26	3.39%
108	Kalihi-waena	13.29	3.86	14.00	4.00	0.71	6	0.92
109	Kaluwela	13.67	2.45	14.00	3.08	0.33	8	0.41
111	Likelike	9.86	4.59	12.33	3.77	2.48	20	4.46%
112	Linapuni	12.04	3.51	13.89	2.53	1.86	27	3.90%
115	Royal	12.25	1.89	13.25	2.36	1.00	3	0.93
203	Maili	11.33	4.43	14.56	1.65	3.22++	17	3.52*
206	Nanakuli El.	11.38	3.57	13.83	2.22	2.45	28	4.19%
210	Makaha	6.16	4.43	8.21	5.47	2.05	18	1.43
302	Hauula	11.97	3.93	12.48	3.84	0.52	28	1.15
303	Kaaawa	11.57	3.55	13.71	3.90	2.14	6	2.23
304	Kahaluu	10.80	4.16	13.20	2.62	2.40	9	2.84*
306	Laie	13,22	2.76	15.00	0.91	1.78++	17	2.90*
309	Ben Parker	9.71	4.20	14.54	2,23	4.83++	23	6.82*
310	Waimanalo	13.33	2.52	14.67	1.53	1.33	2	2.00
402	Waialua	9.30	4.19	12.50	4.33	3.20	9	2.82*
403	Aiea	13.24	2.84	15.47	1.23	2.24++	16	3.82*
404	Wahiawa	11.58	4.80	14.00	3.25	2.42	11	2.15
405	Haleiwa	6.27	3.86	11.07	3.90	4.80	14	5.30*
502	Koloa	14.63	1.83	15.32	1.20	0.68	18	2.00
603	Kula	12.43	2.74	14.93	1.07	2.50++	13	3.83*
607	Wailuku	8.44	3.91	14.11	2.32	5.67++	8	5.75*
703	Holualoa	13.31	3.65	14.81	2.66	1.50	15	3.67*
704	Honaunau	11.11	4.81	15.22	1.99	4.11++	8	3.31*
705	Hookena	14.78	1.48	13.44	2.55	-1.33	8	1.89
706	Kapiolani	8.10	3.81	9.50	3.69	1.40	19	2.93%
708	Keaukaha	12.40	5.86	13.40	4.16	1.00	4	1.20
711	Laupahoehoe	11.20	4.99	15.00	1.51	3.80++	14	2.93*
712	Naalehu	13.86	1.66	14.64	2.56	0.79	13	1.56
713	Paauilo	8.25	5.50	15.00	1.15	6.75	3	2.82
714	Pahoa	8.20	5.36	14.60	2.07	6.40+⊹	4	2.96*

<sup>\*</sup>Significant at the .05 level

<sup>\*\*</sup>Significant at or beyond the .01 level
+Significant at the .05 level after correction for statistical regression

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 46

Analysis of Regression of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Alphabet Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	2766.059	2766.059	436.848**
Residual	520	3292.566	6.332	
Total	521	6058.625		

<sup>\*\*</sup>Significant at or beyond the .01 level

Table 47

Analyses of First Grade Title I 1969-70 Pre-test and Post-test
Data (36 Schools) on the Metropolitan Readiness Tests
(Numbers Subtest)

******	SCHOOL	PRE-T		POST-				
		(01-19	<b>-</b> 70)	(05-1	1-70)			
						Mean	df	
		Mean	SD	Mean	SD	Diff	(N-1)	t
101	Anuenue	8.11	2.80	11.00	4.06	<b>2.</b> 89	8	3.09*
102	Fern	10.22	3.60	12.89	4.04	2.67+⊹	8	2.67*
103	Kaahumanu	13.22	3.10	14.30	3.02	1.09	22	1.90
104	Kaewai	9.26	3.15	12.53	4.12	3.26	37	4.70%
105	Kaiulani	10.48	3.97	10.52	3.56	0.03	<b>2</b> 8	0.07
107	Kalihi-kai	11.74	3.81	13.89	3.40	2.15⊹⊹	<b>2</b> 6	3.39*
108	Kalihi-waena	10.71	3.64	14.43	4.86	3.71++	6	4.60*
1.09	Kaluwela	13.67	4.18	14.22	4.84	0.56	. 8	0.73*
111	Likelike	10.10	3.21	10.95	2.48	0.86	20	1.43
112	Linapuni	12.93	3.50	13.75	3.80	0.82	27	1.66
115	Royal	16.25	5.12	14.50	5.20	~1.75	3	1.22
203	Maili	10.06	3.32	14.06	2.82	4.001-}-	17	5.96
206	Nanakuli El	11.62	3.50	15.41	3.02	3.79	<b>2</b> 8	5.15*
210	Makaha	8.37	3.09	8.84	4.73	0.49	18	0.42
302	Hauula	13.07	4.24	12.83	3.95	-0.24	<b>2</b> 8	0.53
303	Kaaawa	12.14	3.44	12.57	2.94	0.43	6	0.57
304	Kahaluu	10.40	2.88	11.60	<b>3.7</b> 8	1.20	9	1.13
306	Laie	16.39	2.28	14.94	3.06	-1.44	17	1.85
309	Ben Parker	8.38	2.67	14.25	3.40	5.88+-	23	8.83*
310	Waimanalo	10.67	2.08	11.00	1.00	0.33	2	0.20
402	Waialua	8.30	3.27	11.20	2.25	2.90	9	3.14*
403	Aiea	11.59	2.29	14.59	3.04	3.00	16	4.76*
404	Wahiawa	12.58	3.29	14.75	2.96	2.174+	11	3.12%
405	Haleiwa	7.93	3.2ó	10.87	2.67	2.93	14	3.20*
502	Koloa	13.47	4.40	15.84	3.82	2.37++	18	3.75*
603	Kula	8.93	2.59	11.64	2.56	2.71	13	3.65*
607	Wailuku	9.33	1.66	12.33	2.29	3.00++	8	4.24*
703	Holualoa	13.31	3.46	16.13	4.75	2.81++	1.5	3.24*
704	Honaunau	3.89	2.67	13.22	3.60	4.33-+	8	2.71*
<b>70</b> 5	Hookena	10.44	3.84	11.00	5.77	0.56	8	0.51
706	Kapiolani	9.85	3.22	11.10	3.42	1.25	19	1.92
708	Keaukaha	12.60	4.04	13.60	3.05	1,00	4	0.71
711	Laupahoehoe	10.33	3.27	12.33	2.41	2.00	14	2.50%
712	Naalehu	14.29	2.73	14.71	2.33	0.43	13	0.49
713	Paauilo	11.00	5.23	13.50	1.00	2.50	3	0.86
714	Pahoa	11.60	1.34	13.00	2.00	1.40	4	0.98

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>→</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 48

Analyses of Regression of First Grade Title I 1969-70

Pre-test and Post-test Data (36 Schools) on the

Metropolitan Readiness Tests (Numbers Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	2701.609	2701.609	307.323**
Residual	520	4571.203	8.791	
Total	521	7272.813		

<sup>\*\*</sup>Significant at or beyond the .01 level

Table 49 Analyses of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Copying Subtest)

	SCHOOL	PRE-T	EST	POST-	TEST			
		(01-19		(05-1	1-70)			
		<b>\</b>		•		Mean	df	
		Mean	SD	Mean	SD	Diff	(N-1)	t.
	_							
101	Anuenue	5.89	3.14	5.89	3.02	0.00	8 .	0.00
102	Fern	6.22	2.05	7.22	1.09	1.00	8	1.66
103	Kaahumanu	7.61	2.62	7.26	3.25	<b>-0.3</b> 5	22	0.48
104	Kaewai	5.89	2.37	5.68	2.54	-0.21	37	0.45
105	Kaiulani	5.93	3.12	7.76	3.58	1.83++	28	3.43*
107	Kalihi-kai	7.44	2.12	10.63	2.32	3.19+-⊱	26	8.04*
108	Kalihi-waena	6.00	1.00	9.71	2.63	3.71++	6	4.29*
109	Kaluwela	6.33	1.94	6.56	1.42	0.22	8	0.48
111	Likelike	10.62	2.92	10.52	2.75	-0.10	20	0.20
112	Linapuni	5.71	3.10	6.64	2.60	0.93	27	2.37%
115	Royal	8.50	5.57	7.25	2.22	<b>1.2</b> 5	3	0,66
203	Maili	2.67	1.71	6.33	2.54	3.67++	17	6.35%
206	Nanakuli El	6.83	2.87	8.45	2.56	1.62	28	4.13*
210	Makaha	5.26	4.32	5.79	3.54	0.53	18	0.75
302	Hauula	8.17	3.30	7.79	2.68	-0.38	28	0.68
303	Kaaawa	8.71	3.90	9.14	2.79	0.43	6	0.39
304	Kahaluu	6.10	<b>3.</b> 38	6.00	4.06	-0.10	9	0.08
306	Laie	6.22	2.29	5.94	2.55	-0.28	17	0.40
309	Ben Parker	4.17	1.81	8.67	1.97	4.50++	23	11.82*
310	Waimanalo	4.67	3.06	4.67	2.08	0.00	2	0.00
402	Waialua	7.00	3.62	6.30	2.98	-0.70	9	0.77
403	Aiea	7.94	3.45	9.71	3.64	1.76+⊦	16	3.12*
404	Wahiawa	5.92	2.43	7.33	2.53	1.42	11	3.03*
405	Haleiwa	6.07	2.96	9.47	3.34	3.40+⊹	14	4.08*
502	Koloa	6.16	2.77	10.16	2.83	4.00+	18	5.85*
603	Kula	8.86	2.44	9.93	2.50	1.07	13	1.42
607	Wailuku	5.89	3.10	7.44	2.07	1.56	8	1.47
703	Holualoa	7.69	2.89	5.88	1.31	-1.81++	15	2.35*
704	Honaunau	4.78	3.38	9.00	2.12	4.22++	8	5.43%
705	Hookena	10.78	2.33	11.56	2.01	0.78	8	1.36
706	Kapiolani	5.60	2.84	5.90	2.53	0.30	19	0.74
708	Keaukaha	9.80	2.95	6.60	3.58	-3.20+	4	4.35*
711	Laupahoehoe	11.73	1.53	10.40	1.96	-1.33	14	2.81*
712	Naalehu	11.57	1.99	8.79	1.63	-2.79⊹⊹	13	4.48*
713	Paauilo	2.75	4.27	12.75	0.96	10.00	3	2.94*
714	Pahoa	9.20	3.27	6.00	2.45	-3.20+-	4	3.30%



<sup>\*</sup>Significant at the .05 level \*\*Significant at or beyond the .01 level ++Significant at or beyond the .01 level after correction for statistical regression

Table 50

Analyses of Regression of First Grade Title\_I.1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Copying Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio 185.591**	
Regression	1	1345.139	1345.139		
Residual	520	3768.896	7.48		
Total	521	5114.035			

\*\*Significant at or beyond the .01 level

Table 51 Analyses of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Total Score)

	SCIi0 <b>0L</b>	PRE-TEST (01-19-70)		POST-TEST (05-11-70)				
						Mean	df	
		Mean_	SD	<u>Mean</u>	SD	Diff_	(N-1)	
101	Anuenue	45.67	12.60	54.00	17.16	8.33	8	2.46*
1.02	Fern	50.89	10.76	62,33	8.23	11.44++	8	4.78**
103	Kaahumanu	62.04	9.73	67.52	8.92	5.48	22	4.25**
104	Kaewai	48.76	10.40	56.45	15.23	7.68+	37	3.70**
105	Kaiulani	49.28	13.53	55.07	16.50	5.79	28	4.20
107	Kalihi-kai	57.48	9.66	68.07	10.80	10.594-	26	7.84**
108	Kalihi-waena	55.86	12.58	65.43	12.74	9.57++	6	5.40**
1.09	Kaluwela	62.22	9.88	64.67	12.30	2.44	8	1.06
111	Likelike	53.29	10.71	58.76	10.26	5.48	20	4.25**
112	Linapuni	56.86	12.50	62.39	12.56	5.54	27	4.56**
115	Royal	63.25	13.72	71.25	18,48	8.00	3	1.34
203	Maili	47.11	10.29	65.50	8.90	18.39++	17	12.46*
206	Nanakuli El.	52.55	9.50	63.28	9.19	10.72	28	8.76*
210	Makaha	38.42	14.40	43.63	20.49	5.21	18	1.06
302	Hauula	57.83	14.60	60.34	12.68	2.52	28	2.01
303	Kaaawa	59.57	8.90	60.29	7.83	0.71	6	0.26
304	Kaha luu	48.40	11.08	60.40	11.74	12.00++	9	3.63*
306	Laie	65.00	6.40	63.00	7.17	-2.00	17	1.07
30 <b>9</b>	Ben Parker	45.50	10.54	67.04	8.44	21.54⊹⊹	23	16.22*
31.0	Waimanalo	51.67	3.21	53.33	4.04	1.67	2	0.56
402	Waialua	46.60	9.28	56.40	8.76	9.80	9	4.10*
403	Aiea	57.06	10.14	74.65	6.55	17.59 <del>++</del>	16	10.58*
404	Wahiawa	56.08	11.59	66.92	11.74	10.83++	11	4.59*
405	Haleiwa	43.20	12.96	56.33	11.65	13.13++	14	4.73*
50 <b>2</b>	Koloa	62.42	12.67	71.11	11.08	8.68++	18	4.39%
603	Kula	57.07	8.89	65.79	9.61	8.71++	13	4.81%
607	Wailuku	43.44	7.11	60.67	5.17	17.22+	8	12.03**
703	Holualoa	62.13	12.34	69.69	12.44	7.56+-	15	3.90*
704	Honaunau	43.78	11.13	61.56	11.52	17.78++	8	6.20%
705	Hookena	63.78	10.18	65.33	11.94	1.56	8	0.90
706	Kapiolani	45.35	9.00	52.45	11.17	4.10	19	4.50*
708	Keaukaha	64.20	16.45	63.20	16.96	-1.00	4	0.29
71.1	Laupahoehoe	58.93	8.49	66.13	7.32	7.20	14	4.31*
712	Naalehu	71.00	7.41	67.71	7.44	-3.29	13	2.33*
713	Paauilo	47.25	18.66	70.50	0.58	23.25	3	2.46
714	Pahoa	49.80	7.12	62.40	8.14	12.60++	4	5.60*

<sup>\*</sup>Significant at the .05 level

<sup>\*\*</sup>Significant at or beyond the .01 level
+Significant at the .05 level after correction for statistical regression

<sup>→</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 52

Analysis of Regression of First Grade Title I 1969-70 Pre-test and Post-test Data (36 Schools) on the Metropolitan Readiness Tests (Total Score)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	4245 7.746	42457.746	587.193**
Residual	520	37599.254	72.306	
Total	521	800 <b>57.</b> 000		

Table 53

Analyses of Second Grade Title I 1969-70 Pre-test and Post-test
Data (19 Schools) on the Gates-MacGinitie Reading Tests
(Vocabulary Subtest, Primary B)

	SCHOOL	PRE-T		POST-	TEST 1-70)			
		(01-13	-70)	(05-1	(03 11 70)		đf	
	······································	Mean	SD	<u>Mean</u>	SD	Diff	(N-1)	t
203	Maili	9.58	1.83	14.50	6.32	4.92	11	2.41*
210	Makaha	15.00	11.30	16.17	12.20	1.17	17	0.61
402	Waialua	7.80	4.55	9.60	4.22	1.80	4	1.77
403	Aiea	9.18	2.60	16.12	4.03	6.9 <b>4</b> -}-+	16	5.96**
404	Wahiawa	11.00	1.58	17.00	4.30	6.00	4	3.00*
501	Waimea	11.50	3.87	11.83	5.54	0.33	11	0.16
506	Kalaheo	11.50	8.54	18.75	11.50	7.25	3	3.75*
602	Waihee	8.86	7.36	15.71	2.56	6.86+	6	3.09*
603	Kula	18.09	9.59	23.91	9.30	5.82++	10	3.36**
604	Kihei	16.00	2.73	25.00	5.66	9.00++	7	3.41**
607	Wailuku	15.33	4.10	18.50	5.90	3.17	<b>1</b> 1	2.54
703	Holualoa	21.80	8.80	27.00	10.28	5.20	9	2.42*
704	Honaunau	12.67	6.43	16.67	6.35	4.00	2	0.66
705	Hookena	8.38	4.87	11.13	6.03	2.75	7	1.00
708	Keaukaha	14.10	8.35	16.80	8.20	2.70	9	1.84
711	Laupahoehoe	11.75	5.42	18.63	5.24	6.88++	7	5.40**
712	Naalehu	19.75	3.06	23.63	7.56	3.88	7	1.40
713	Paauilo	13.25	1.67	21.00	7 <b>.4</b> 8	7.75++	7	2.88*
714	Pahoa	19.00	5.66	17.50	4.95	-1.50	1	3.00

Table 54

Analysis of Regression of Second Grade Title I 1969-70 Pre-test and Post-test Data (19 Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Primary B)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	4726.629	4726.629	127.057**
Residual	161	5989.336		
Total	162	10715.965		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for statistical regression

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical , regression

Table 55

Analyses of Second Grade Title I 1969-70 Pre-test and Post-test
Data (19 Schools) on the Gates-MacGinitie Reading Tests
(Comprehension Subtest, Primary B)

	SCHOOL		TEST 9-70)	POST- (05-1	TEST 1-70)			
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
203	Maili	7.00	3.49	10,42	3.75	3,42+	11	5.86**
210	Makaha	11.06	5.99	9.22	7.73	-1.83	17	1.71
402	Waielua	8,60	1.34	6.40	1.82	-2.20	4	1.58
403	<b>Aie</b> a	7.24	2.02	7.06	3.72	-0.18	16	0.22
404	Wahi.awa	5.00	1.87	9.40	4.28	4.40	4	2.44
501	Waimea	8.42	3.92	8.42	2.54	0.00	11	0.00
50 <b>6</b>	Kal aheo	6.00	12.00	8.50	8.58	2.50	3	1.19
602	Waihee	3.29	3.15	10,43	4.31	7.14	6	5.35**
603	Kula	12.27	6.23	13.27	6.05	1.00	10	1.25
604	Kihei	8.75	3.41	12.25	5.92	3.50	7	1.35
60 <b>7</b>	Wailuku	9.50	2.28	13.75	6.05	4.25++	11	2.39*
<b>7</b> 03	Holualoa	13.40	7.14	15.90	5.00	2.50	9	1.27
704	Honaunau	13.33	7.02	16.67	5.86	3.33	2	0.57
705	Hookena	3,25	3.45	6.63	3.50	3,38	7	2.45*
708	Keaukaha	11.70	5.93	9.90	7.17	-1.80	9	0.90
711	Laupahoehoe	6.75	4.43	11.13	4.16	4.38++	7	2.30*
712	Naalehu	10.88	4.61	15.50	6.57	4.63	7	1.32
713	Paauilo	8.63	4.10	9.00	5.13	0.38	7	0.19
714	Pahoa	11.50	4.95	10.50	2.12	-1.00	1	0.50

Table 56

Analysis of Regression of Second Grade Title I 1969-70 Pre-test and Post-test Data (19 Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	1266.792	1266.792	51.583**
Residual	161	3953.896	′ <b>24</b> .558	
Total	162	5220.688		

<sup>\*</sup>Significant at the .05 level

<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for

statistical regression

Significant at or beyond the .01 level after correction for statistical regression

Table 57

Analyses of Third Grade Title I 1969-70 Pre-test and Post-test
Data (17 Schools) on the Gates-MacGinitie Reading Tests
(Vocabulary Subtest, Primary B)

	SCHOOL	PRE-TEST (01-19-70)		POST-TEST (05-11-70)				
		Mean	SD	<u>Mean</u>	SD	Mean Diff	df (N-1)	t
203	Maili	12.11	2.15	15.67	6.08	3.56	8	1.37
21.0	Makaha	19.00	10.09	23.00	10.97	4.00	17	3.96**
402	Waialua	12.25	4.92	14.25	4.35	2.00	3	2.83
403	Aica	13.45	4.68	20.55	6.83	7.09++	10	4.02**
404	Wakiawa	18.38	9.83	21.88	13.51	3.50	7	1.22
501	Waimea	22.83	8.54	27.17	9.28	4.33+	5	3.25*
603	Kula	26.89	5.80	28.78	7.45	1.89	8	2.16
605	Paia	36.25	8.23	35.25	8.18	~1.00	11	0.73
607	Wailuku	22.00	6.54	27.22	7.53	5.22++	8	3.86**
60g	Kilohana	16.60	3.91	21.20	8.90	4.60	4	1.49
703	Holualoa	24.29	9.2 <b>7</b>	30.00	8.96	5.71++	6	5.38**
704	Honaunau	19.33	8.33	34.00	7.00	14.67++	2	16.63**
705	Hookena	18.14	4.56	18.00	8.12	-0.14	6	0.07
708	Keaukaha	25.25	12.23	26.00	12.68	0.75	3	0.88
711	Laupahoehoe	19.33	11.85	20.33	13.65	1.00	2	0.87
712	Naalehu	22.75	5.85	25.38	7.50	2.63	7	1.70
714	Pahoa	19.60	8.56	24.00	7.84	4.40	4	2.21

Table 58

Analysis of Regression of Third Grade Title I 1969-70 Pre-test and Post-test Data (17 Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Primary B)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	9323.305	9323.305	324.450**
Residual	126	3620.695	28.736	
Total	127	12944.000		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for statistical regression

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 59 Analyses of Third Grade Title I 1969-70 Pre-test and Post-test Data (17 Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest, Primary B)

	SCHOOL	PRE-T (01-19			TEST 1-70)			
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
203	Ma <b>ili</b>	8.33	2.06	11.33	2.24	3.00	8	2.71*
210	Makaha	12.22	6.94	14.94	8.54	2.72	17	2.01
402	Waialua	7.75	2.22	6.00	3.83	-175	3	0.63
403	Aiea	10.18	2.75	10.91	7.13	0.73	10	0.49
404	Wahiawa	12.88	9.13	14.75	8.55	1.88	7	1.44
501	Wa <b>ime</b> a	13.83	5.56	14.17	5.95	0.33	5	0.33
603	Kula	16.44	5.34	16.78	7.36	0.33	8	0.17
605	Paia	25.25	4.03	25.17	4.82	-0.08	11	0.05
607	Wa <b>i</b> luku	10.33	2.92	18.44	4.19	8.11++	8	4.96**
<b>509</b>	Kilohana	10.00	3.00	12.00	7.14	2.00	4	0.94
703	Holualoa	15.14	4.74	20,43	5.2 <b>2</b>	5.29++	6	7.77**
704	Honaunau	13.00	6.24	22.33	4.93	9.33+4	2	7.00*
705	Hookena	9 <b>.2</b> 9	3.86	10.43	3.82	1.14	6	0.88
708	Keaukaha	16.00	8,60	18.25	10.21	2.25	3	1.17
711	Laupahoehoe	13.00	4.58	8,33	4.51	<b>-</b> 4.67⊹⊹	2	14.00**
712	Naalehu	11.13	5.82	12,88	5.36	1.75	7	1.37
714	Pahoa	11.40	3.29	11.60	6.04	0.20	4	0.14

Table 60

Analysis of Regression of Third Grade Title I 1969-70 Pre-test and Post-test Data (17 Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest, Primary B)

Source	df	Sum of Squares	Mean Square	F-ratio
Kegression	1	4234.691	4234.691	173.604**
Residual	126	3073.488	24.393	
Total	127	7308.180		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level
++Significant at or beyond the .01 level after correction for statistical regression

Table 61

Analyses of Fourth Grade Title I 1969-70 Pre-test and Post-test
Data (13 Schools) on the Gates-MacGiritie Reading Tests
(Vocabulary Subtest, Primary C)

SCHOOL			TEST 9-70)	POST-TEST (05-11-70)				
	<del></del>	Mean	SD_	Mean	SD	Mean Diff	df (N-1)	t
401	Ha lawa	23.54	<b>7.</b> 26	24.85	7.03	1.31	12	0 <b>.7</b> 8
402	Waialua	15.13	4.85	16.88	5.41	1.75	7	0.93
403	Aiea	22.17	5.85	23.83	<b>7.</b> 86	1.67	5	0.79
501	Waimea	22.89	6.05	24.00	5.36	1.11	8	1.00
503	Караа	30.69	4.91	33.23	5.05	2.54+	12	2.95**
506	Kalaheo	29.00	7.62	3 <b>1.7</b> 5	4 <b>.7</b> 9	2 <b>.7</b> 5	3	1.13
603	Kula	33.25	2.06	33 <b>.7</b> 5	6.18	0.50	3	0.23
605	Paia	36.00	7.35	35.50	5 <b>.</b> 5 <b>7</b>	-0.50	3	0.18
609	Kilohana	22.40	2.61	26.00	<b>7.</b> 52	3.60	4	1.54
<b>7</b> 03	Holualoa	26 <b>.7</b> 5	7.65	28.63	10.17	1.88	7	1.34
<b>70</b> 4	Honaunau	21.40	8.11	24.60	9.86	3.20	4	1.37
705	Hookena	22.67	6.12	22.33	7.37	-0.33	5	0.29
<b>7</b> 08	Keaukaha	2 <b>7.</b> 36	7.34	29.82	6.3 <b>7</b>	2.45+	10	2.19*

Table 62

Analysis of Regression of Fourth Grade Title I 1969-70 Pre-test and Post-test Data (13 Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Primary C)

Source	df	Sum of Squares	Mean Square	F-ratio	
Regression	1	4556.266	4556.266	246.075**	
Residual	94	1740.484	18.516		
Total	95	6296 <b>.7</b> 50			

<sup>\*</sup>Significant at the .05 level

<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for statistical regression

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 63

Analyses of Fourth Grade Title I 1969-70 Pre-test and Post-test
Data (13 Schools) on the Gates-MacGinitie Reading Costs
(Comprehension Subtest, Primary C)

S	CHOOL	PRE-TEST (01-19-70)		POST-TEST (05-11-70)				
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
401	Halawa	17.85	6.39	20.31	9 <b>.7</b> 4	2.46	12	1.58
402	Waialua	11.13	1.46	12.88	2.36	1 <b>.7</b> 5	7	1.76
403	Aiea	18.17	6.68	18.33	6.95	0.17	5	0.05
501	Waimea	14.33	4.74	20.44	4.30	6.11++	8	3.59*
5 <b>03</b>	Kapaa	23.85	6.26	28.85	8.02	5.00%	12	4.14**
5 <b>06</b>	Kalaheo	22.25	7.93	29 <b>.7</b> 5	9.91	<b>7.</b> 50	3	1.79
603	Kula	21.50	4.51	21.75	6.99	0.25	3	0.13
605	Paia	33.50	5.32	2 <b>7.</b> 00	<b>7.7</b> 9	-0.65	3	2.10
609	Kilohana	19.20	6 <b>.3</b> 8	17.40	4.34	-1.80	4	88.0
703	Holualoa	18.38	6.65	23.38	8.18	5 <b>.0</b> 0	7	4.08**
<b>7</b> 04	Honaunau	18.60	7.67	20.20	6.5 <b>7</b>	1.60	4	0.67
<b>7</b> 05	Hookena	15.50	5 <b>.7</b> 9	16.33	5.85	0.83	5	0.39
<b>7</b> 08	Keaukaha	21.09	5.26	21.36	8.56	0.27	10	0.11

Table 64

Analysis of Regression of Fourth Grade Title I 1969-70 Pre-test and Post-test Data (13 Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest, Primary C)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	3188.265	3188.265	86 <b>.7</b> 84**
Residual	9 <b>4</b>	3453.360	<b>36.73</b> 8	
Cotal	95	6641.625		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 65

Analyses of Fifth Grade Title I 1969-70 Pre-test and Post-test
Data (12 Schools) on the Gates-MacGinitie Reading Tests
(Vocabulary Subtest, Primary C)

S	SCHOOL PRE-TEST (01-19-70)		POST- (05-1	TEST 1-70)				
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
401	Halawa	27.46	7.47	31.54	9.65	4.08++	12	3.03**
402	Waialua	20.13	6.15	20.50	6.85	0.38	7	0.14
403	Aiea	30.00	7.18	<sub>57.</sub> 31.40	6.50	1.40	4	0.89
501	Waimea	32.83	6.59	35.83	7.76	3.00	5	1.84
506	Kalaheo	24.43	8.26	23.71	8.6 <b>7</b>	-0.71	6	1.18
603	Kula	33.40	6.35	37.10	7.65	3.70++	9	3.18**
604	Kihei	29.50	<b>7.7</b> 8	35.50	0.71	6.00	1	1.00
609	Kilohana	32.33	3.91	35.11	6.97	<b>2.7</b> 8	8	2.07
<b>7</b> 0 <b>3</b>	Holualoa	28.22	5.04	27.22	5 <b>.7</b> 8	-1.00	8	0.51
<b>7</b> 04	Honaunau	33.67	9.71	35.1 <b>7</b>	9.04	1.50	5	0.66
705	Hookena	29.14	10.24	29.43	9.88	0.29	6	0.12
708	Keaukaha	34.78	<b>7.</b> 90	34.89	8.21	0.11	8	0.07

Table 66

Analysis of Regression of Fifth Grade Title I 1969-70 Pre-test and Post-test Data (12 Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Primary C)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	5118 <b>.7</b> 38	5118 <b>.7</b> 38	197.433**
Residual	89	2307.449	25.926	
Total	90	7426.188		

<sup>\*\*</sup>Significant at or beyond the .01 level



<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 67

Analyses of Fifth Grade Title I 1969-70 Pre-test and Post-test
Data (12 Schools) on the Gates-MacGinitie Reading Tests
(Comprehension Subtest, Primary C)

SCHOOL		PRE-T (01-19			-TEST 11-70)			
	<del>-, , , , , , , , , , , , , , , , , , , </del>	Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
401 Hala	ıwa	22.46	9.07	22.77	7.40	0.31	12	0.21
402 Waia	lua	12.63	5.97	13.63	1.51	1.00	7	0.42
403 Aiea	1	24.00	5.61	27.20	8.17	3.20	4	2.43
501 Waim	nea	24.83	8.18	27.00	7 <b>.</b> 51	2.17	5	1.47
506 Ka <b>l</b> a	iheo	16.57	4.35	13.86	4.88	-2.71	6	1.82
603 Kula	ı	25.90	8,96	27.70	8.04	1.80	9	1.08
604 Kihe	e <b>i</b> .	17.50	7.78	25.50	9.19	8.00	1	8.00
6 <mark>09 Kilo</mark>	hana	27.67	5.94	27.89	7.15	0.22	8	0.10
703 Holu	ıaloa	20.00	5.05	21.56	6.69	1.56	8	0.73
704 Hona	unau	28.33	5.13	27.83	11.16	-0.50	5	0.14
705 Hook	ena	22.00	9.95	21.43	10.26	-0.57	6	0.76
708 Keau	ıkaha	26.22	9.72	30.89	7.80	4.67++	8	3.68**

Table 68

Analysis of Regression of Fifth Grade Title I 1969-70 Pre-test and Post-test Data (12 Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest, Primary C)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	4577.813	4577,813	159,314**
Residual	89	2557.375	28.735	
Total	90	7135.188	•	

<sup>\*\*</sup>Significant at or beyond the .01 level



<sup>₩-</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 69 Analyses of Sixth Grade Title I 1969-70 Pre-test and Post-test Data (11 Schools) on the Gates-MacGintie Reading Tests (Vocabulary Subtest, Primary C)

SCHOOL		PRE-TEST (01-19-70)			POST-TEST (05-11-70)			
						Mean	df	
		Mean	SD	Mean	SD	Diff	(N-1)_	t
401	Halawa	38.25	7.71	41.08	6.10	2.33++	11	2.32*
403	Aiea	30.29	5.47	31.29	7.43	1.00	6	0.54
503	Караа	33.08	6.99	37.46	5.25	4.38++	12	4.64**
506	Kalaheo	29.13	10.86	30.75	10.11	1.63	7	0.87
503	Kula	37.88	4.26	39.50	5.50	1.63	7	1.72
605	Paia	42.20	9.34	38.80	8.67	-3.40++	L <sub>t</sub>	2.72*
609	Kilohana	38 <b>.33</b>	3.72	45.33	1.63	7.00+-	5	3.42*
703	Holualoa	32.00	10.15	33.73	11.38	1.73	10	1.61
704	Honaunau	38.40	12.40	37.60	11.80	-0.80	4	0.64
705	Hookena	36.83	3.97	36.33	6.15	-0.50	5	0.33
708	Keaukaha	36.33	4.89	37.17	6.66	0.83	11	0.82

Table 70 Analysis of Regression of Sixth Grade Title I 1969-70 Pre-test and Post-test Data (11 Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Primary C)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	4697.746	4697.746	255.886**
Residual	92	1689.004	18.359	
Total	93	6386 <b>.7</b> 50		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level ++Significant at or beyond the .01 level after correction for statistical regression

Table 71

Analyses of Sixth Grade Title I 1969-70 Pre-test and Post-test
Data (11 Schools) on the Gates-MacGinitie Reading Tests
(Comprehensive Subtest)

S	CHOOL		PRE-TEST (01-19-70)		EST -70)			
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
401	Halawa	30.67	9.40	36.17	8.76	5.50++	11	3.49**
403	Aiea	19.29	5.53	26.14	7.24	6.86+-	6	2.77*
503	Караа	26.69	8.47	31.77	8.14	5.08+1-	12	3.97**
506	Kalaheo	20 <b>.7</b> 5	10.02	16.13	8.71	-4.63	7	1.99
603	Kula	28.50	6.93	29.00	10.72	0.50	7	0.19
605	Paia	36.60	8.26	34.20	11.56	-2.40	4	1.22
609	Kilohana	36.50	3.83	39.00	4.05	2.50	5	1.54
703	Holualoa	26.73	12.69	28.73	11.90	2.00	10	1.04
704	Honaunau	34.20	10.13	36.60	12.22	2.40	4	1.86
705	Hookena	29.67	6.19	30.83	9.15	1.17	5	0.45
708	Keaukaha	28.58	10.71	33.83	8.03	5 <b>.</b> 25++	11	3.14**

Table 72

Analysis of Regression of Sixth Grade Title I 1969-70 Pre-test and Post-test Data (11 Schools) on the Gates-MacGinitie Reading Tests (Comprehensive Subtest, Primary C)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	6827.156	6827.156	178.737**
Residual	92	3514.094	38.197	
Total	93	10341.250		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 73 Analyses of Seventh Grade Title I 1969-70 Pre-test and Post-test Data (Ten Schools) on the Gates-MacGinitie Reading Tests (Speed Subtest, Survey D)

SCH <b>OOL</b>		PRE-T (01-19		FOST-TEST (05-11-70)				
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
207	Waianae	14.66	7,18	15.66	8.30	1.00	28	0.65
306	Laie	20.33	8,50	10.33	5.05	-10.00	5	2.88*
310	Waimanalo	19.40	9.45	17.80	9.20	-1.60	4	0.28
406	Aiea	12.88	4,40	14.72	4.76	1.84	24	1.94
506	Kalaheo	16.50	4.36	33.00	6.00	16.50+	3	5.03*
702	Hilo Int	17.86	6.78	20.63	7.11	2.77	56	2.62**
703	Holualoa	16.11	5.64	20.78	7.00	4.67+	8	3.06*
704	Honaunau	17.86	5.15	19.57	3.41	1.71	6	0.75
705	Hookena	18.17	9.70	24.17	13.33	6.00	5	1.61
710	Konawaena	18.29	8.06	20.00	5.97	1.71	6	0.46

Table 74

Analysis of Regression of Seventh Grade Title I 1969-70 Pre-test and Post-test Data (Ten Schools) on the Gates-MacGinitie Reading Tests (Speed Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	1687.170	1687.170	31.868**
Residual	<b>14</b> 8	7835 <b>.5</b> 23	52.943	
Total	<b>14</b> 9	9522.695		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level ++Significant at or beyond the .01 level after correction for statistical regression

Table 75

Analyses of Seventh Grade Title I 1969-70 Pre-test and Post-test
Data (Ten Schools) on the Gates-MacGinitie Reading Tests
(Accuracy Subtest, Primary D)

SCHOOL		PRE-T (01-19	_	POST-TEST (05-11-70)				
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
20 <b>7</b>	Waianae	10.00	2.80	11.59	4.62	1.59	28	1.92
306	Laie	20.83	8.38	7.00	4.65	-13.83	5	5.05**
310	Waimanalo	12,20	4.87	12.80	3.70	0.60	4	0.29
406	Aiea	11.44	3.5 <b>5</b>	12.56	4.66	1.12	24	1.08
506	Kalaheo	13 <b>.7</b> 5	4.92	18.25	<b>7.</b> 85	4.50	3	2.03
<b>7</b> 02	Hilo Inter.	14.30	3.85	16.84	4.86	2.54	56	4.45
<b>7</b> 03	Holualoa	13.22	6.04	18.22	8.71	5.00 <del>+</del>	8	3.69%
<b>7</b> 04	Honaunau	12.43	5.53	15.71	3.35	3.29+	6	2.45%
<b>7</b> 05	Hookena	13.50	8.22	16.00	9.01	2.50	5	1.35
710	Konawaena	13.43	5.13	16.43	6.43	3.00+	6	3.55**

Table 76

Analysis of Regression of Seventh Grade Title I 1969-70 Pre-test and Post-test Data (Ten Schools) on the Gates-MacCinitie Reading Tests (Accuracy Subtest, Primary D)

Source	đf	Sum of Squares	Mean Square	F-ratio	
Regression	1	2115.416	2115.416	107.995**	
Residual	148	2899.045	19.588		
Total	149	5014.461			

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for statistical regression

<sup>++</sup>Significant at or beyond the .01 level after correction for statistical regression

Analyses of Seventh Grade Title I 1969-70 Pre-test and Post-test
Data (Nine Schools) on the Gates-MacGinitie Reading
Tests (Vocabulary Subtest, Survey D)

_	SCHOOL	PRE-TEST (01-19-70)		POST-TEST (05-11-70)				
		Mean	SD	Mean	<b>S</b> D	Mean <b>Diff</b>	df (N-1)	t
207	Waianae	19.24	7.14	19.31	6.72	0.07	28	0.06
310	Wa <b>i</b> manalo	21.00	6.63	16.80	4.71	-4.20	4	1.89
406	Aiea	23.44	7.17	23.04	7.27	-0.40	24	0.22
506	Kalaheo	24.25	9.36	17.25	9.98	-7.0 <del>0++</del>	-3	3.43*
702	Hilo Int.	25,40	5.9 <b>2</b>	24.21	7.59	-1.19	56	1.87
703	Holualoa	28.44	10.13	28.22	10.97	-0.22	8	0.30
704	Honaunau	25,57	6.75	26.00	7.72	0.43	6	0.27
705	Hookena	19.50	4.59	19.67	4.63	0.17	5	3 <b>0.0</b>
710	Konawaena	21.71	7.97	22.14	4.10	0.43	6	0.20

Table 78

Analysis of Regression of Seventh Grade Title I 1969-70 Pre-test and Post-test Data (Nine Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Survery D)

Source	đf	Sum of Squares	Mean Square	F-ratio
Regression	1	4260.043	4260.043	135.654**
Residual	148	4647.770	31.404	•
Total	149	8907.813		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

 $<sup>\</sup>Rightarrow$  Significant at or beyond the .01 level after correction for statistical regression

Table 79

Analyses of Seventh Grade Title I 1969-70 Pre-test and Post-test
Data (Nine Schools) on the Gates-MacGinitie Reading Tests
(Comprehension Subtest, Survey D)

SCHOOL			PRE-TEST (01-19-70)		POST-TEST (05-11-70)			
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
207	Waianae	16.86	4.03	23.52	<b>7.</b> 55	6.66	<b>2</b> 8	4.74%
310	Waimanalo	18.40	9.04	17.8 <b>0</b>	6.60	-0.60	4	0.15
<b>406</b>	Aiea	25 <b>.7</b> 6	ន <b>.</b> 87	30.20	8,64	4.44	24	2.25*
506	Kalaheo	<b>24.7</b> 5	9.03	16.00	12.33	<b>-8.7</b> 5	3	1.57
702	Hilo Int.	27.42	7.21	30.72	9.01	3.30	56	4.61**
703	Holualoa	31.56	11.93	35 <b>.0</b> 0	11.74	3.44+	8	2.32*
704	Honaunau	23.57	9.29	32.00	8.12	8.43+-	6	4.72**
<b>7</b> 05	Hookena	22.00	6.07	24.17	7.68	2.17	5	1.63
710	Konawaena	26.00	7.37	26.14	6.52	0.14	6	0.10

Table 80

Analysis of Regression of Seventh Grade Title I 1969-70 Pre-test and Post-test Data (Nine Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	6172.043	6172.043	125.331**
Residual	148	7 <b>2</b> 88.395	49.246	
Total	149	13460.438		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*\*</sup>Significant at or beyond the .01 level

<sup>+</sup>Significant at the .05 level after correction for statistical regression

<sup>+</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 81

Analyses of Eighth Grade Title I 1969-70 Pre-test and Post-test
Data (Seven Schools) on the Gates-MacGinitie Reading
Test (Speed Subtest, Survey D)

SCHOOL		PRE-TEST (01-19-70		POST-TEST (05-11-70)			df	
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
207	Wa <b>i</b> a <b>na</b> e	14.39	9.20	20.39	11.10	6.00	22	2.99*
208	1 Nanakuli	5.00	3.58	15.27	9.07	10.27	10	3.73*
310	Waimanalo	17.50	13.48	13.00	2.16	-4.50	3	0.63
₽ <b>07</b>	Waialua	16.33	1.53	25.00	10.15	8.67	2	1.37
703	Holualoa	15.50	6.76	22.00	10.20	6.50	3	3.52%
04	Honaunau	22.88	5.79	26.00	7.37	3.13	7	1.63
10	Konawaena	14.25	2.63	21.00	2.58	6.75	3	14.10*

 $<sup>\</sup>mathbf{1}_{\mathrm{Administered}}$  form E instead of D

Table 82

Analysis of Regression of Eighth Grade Title I 1969-70 Pre-test and Post-test Data (Seven Schools) on the Gates-MacGinitie Reading Tests (Speed Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	901.335	901.335	11.580**
Residual	51	3969.458	77.833	
Total	52	487C.793		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*\*</sup>Significant at or beyond the .01 level

Table 83

Analyses of Eighth Grade Title I 1969-70 Pre-test and Post-test
Data (Seven Schools) on the Gates-MacGinitie Reading
Test (Accuracy Subtest, Survey D)

SCHOOL	PRE-T (01-19		POST-TEST (05-11-70)				
	Mean	SD	Mean	SD	Mean <b>Di</b> ff	df (N-1)	t
207 Waianae	8.70	3.73	11.35	5.36	2.65	22	2.33
208 Nanakuli <sup>1</sup>	11.73	7.72	5.82	3.74	-5.91	10	2.50%
310 Waimanalo	11.75	6.75	9.25	3.59	-2.50	3	1.35
407 Waialua	<b>15.0</b> 0	2.65	19.00	2.65	4.00	2	1.73
703 Holualoa	15.50	6.76	21.00	9.76	5.50⊹⊹	3	3.54*
704 Honaunau	18.13	6.38	22.75	7.05	4.63:-:	7	3.11*
710 Konawaena	10.00	3.56	13.75	3.50	3.75	3	5.96**

<sup>&</sup>lt;sup>1</sup>Administered Form E instead of D

Table 84

Analysis of Regression of Eighth Grade Title I 1969-70 Pre-test and Post-test Data (Seven Schools) on the Gates-MacGinitie Reading Tests (Accuracy Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio	
Regression	1	1454.180	1454.180	63.336**	
Residua <b>l</b>	51	1170.952	22.960		
Cotal	52	2625.133			

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>→</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 85

Analyses of Eighth Grade Title I 1969-70 Pre-test and Post-test
Data (Eight Schools) on the Gates-MacGinitie Reading
Test (Vocabulary Subtest, Survey D)

	SCHOOL	PRE-T			-TEST 11-70)		• 4	
<del></del>		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
207	Waianae	15.00	7.03	14.43	8.02	~0.57	22	0.37
208	Nanakuli <sup>1</sup>	11.82	3.43	11.91	4.83	0.09	10	0.06
310	Waimanalo	15.75	3.30	17.00	4.55	1.25	3	0.44
407	Waialua	26.00	5.57	25.33	4.62	-0.67	2	0.55
703	Holualoa	29.75	9.98	30.25	9.71	0.50	3	0.42
704	Honaunau	30,25	7.70	32.75	8.33	2.50	7	1.42
705	Hookena	14.67	2.69	23.78	12.14	9.11	8	2.16
710	Konawaena	21.00	5.89	16.50	2.65	<b>-</b> 4.50	3	2.56

 $<sup>^{1}</sup>$ Administered Form E instead of D

Table 86

Analysis of Regression of Eighth Grade Title I 1969-70 Pre-test and Post-test Data (Eight Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio	
Regression	Regression 1		3286,369	107.597**	
Residual	51	1557.709	30.543		
Total	5 <b>2</b>	4844.078			

<sup>\*\*</sup>Significant at or beyond the .01 level



Table 87

Analyses of Eighth Grade Title I 1969-70 Pre-test and Post-test
Data (Eight Schools) on the Gates-MacGinitie Reading
Tests (Comprehensive Subtest, Survey D)

S	CHOOL	PRE-4 (01-10		POST-7 (05-1)				
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
207	Waianae	12.26	7.41	16.00	9.77	3.74	22	2.02*
208	Nanakuli <sup>1</sup>	12.73	4.71	12.36	3.38	-0.36	10	0.30
310	Waimanalo	17.50	5.45	15.00	3.92	-2.50	3	0.73
407	Waialua	32.33	6.66	28.00	3.46	-4.33	2	1.59
703	Holualoa	34.75	7.37	39.00	7.02	4.25++	3	17.00**
704	Honaunau	35.2 <b>5</b>	9.16	37.50	10.01	2.25	7	1.54
<b>7</b> 05	Hookena	10.78	3.27	11.78	6.12	1.00	8	0.50
710	Konawaena	24.75	1.89	21.25	7.23	-3.50	3	1.29

Administered form E instead of D

Table 88

Analysis of Regression of Eighth Grade Title I 1969-70 Pre-test and Post-test Data (Eight Schools) on the Gates-MacGinite Reading Tests (Comprehensive Subtest, gurvey D).

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	5073.910	5073.910	107.959**
R <b>esidual</b>	51	2396.922	46.998	
Total	52	7470.832		

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>3+</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 89

Analyses of Ninth Grade Title I 1969-70 Pre-test and Post-test
Data (Five Schools) on the Gates-MacGinitie Reading Tests
(Speed Subtest, Survey D)

SCHOOL	PRE-TEST (01-19-70)			POST-TEST (05-11-70)		16	
	Mean	SD_	<u>Mean</u>	SD_	Mean <u>Diff</u>	df (N-1)	t
.08 Nanakuli <sup>1</sup>	8.80	5.03	13.00	9.30	4.21	9	1.39
09 Waianae	19.92	8.17	20.71	7.33	0.79	<b>2</b> 3	0.63
10 Waimanalo	18.62	0.58	13.33	6.43	<b>-5.</b> 33	2	1.36
07 Waialua	18.80	6.87	17.20	4.09	-1.60	4	0.57
10 Konawaena	20.22	5.59	27.01	7.71	6.80++	73	7.75**

 $<sup>^{\</sup>mathbf{1}}$ Administered form E instead of D

Table 90

Analysis of Regression of Ninth Grade Title I 1969-70 Pre-test and Post-test Data (Five Schools) on the Gates-MacGinitie Reading Tests (Speed Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	1379.726	1379.726	24.762**
Residual	104	5794.879	55.720	
<b>T</b> otal	105	7174.605		

<sup>\*\*</sup>Significant at or beyond the .01 level



<sup>→</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 91

Analyses of Ninth Grade Title I 1969-70 Pre-test and Post-test
Data (Five Schools) on the Gates-MacGinitie Reading Tests
(Accuracy Subtest, Survey D)

S	SCHOOL	PRE-TEST (01-19-70)		POST- (05-1	TEST 1-70)			
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
908	Nanakuli <sup>1</sup>	13.80	4.13	8.50	6.52	-5.30	9	4.16*
209	Waianae	16.04	6.62	17.54	8.22	1.50	23	1.64
10	Waimanalo	11.00	6.56	10,00	3.61	-1.00	2	0.50
07	Waialua Hi	16.60	6.19	15.00	6.40	-1.60	4	0.59
10	Konawaena	17.82	6.12	23.30	<b>7.4</b> 8	5.47⊹⊹	73	9.86*

 $<sup>^{1}</sup>$ Administered form E instead of D

Table 92

Analysis of Regression of Ninth Grade Title I 1969-70 Pre-test and Post-test Data (Five Schools) on the Gates-MacGinitie Reading Tests (Accuracy Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio	
Regression	1	4205,043	4205.043	<b>1</b> 54.231**	
Residual	104	2835,523	27.265		
<b>Total</b>	105	7040.566			

<sup>\*</sup>Significant at the .05 level



<sup>\*\*</sup>Significant at or beyond the .01 level

<sup>---</sup>Significant at or beyond the .01 level after correction for statistical regression

Table 93

Analyses of Ninth Grade Title I 1969-70 Pre-test and Post-test
Data (Six Schools) on the Gates-MacGinitie Reading Tests
(Vocabulary Subtest, Survey D)

SCHOOL		PRE-TEST (01-19-70)		POST-TEST (05-11-70)				
<u> </u>		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
<b>20</b> 8	Nanakuli <sup>1</sup>	17.50	7.38	16.50	9.05	-1.00	9	0.37
209	Waianae	25.54	7.97	24.71	3.30	-0.83	23	0,96
310	Waimanalo	24.00	2.65	24.33	2.52	0.33	2	0.19
407	Waialua Hi	26.40	9.61	27.80	6.50	1.40	4	0.72
5 <b>04</b>	Kapaa	18.33	6.66	13.67	5 <b>.5</b> 1	-4.67	2	2.00
710	Konawaena	29.32	8.08	29.66	8.83	0.34	73	0.67

<sup>1</sup> Administered form E instead of D

Table 94

Analysis of Regression of Ninth Grade Title I 1969-70 Pre-test and Post-test Data (Six Schools) on the Gates-MacGinitie Reading Tests (Accuracy Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio	
Regression	1	60 <b>5</b> 3.078	6053.078	332.149**	
Residual	104	1895.297	13.224		
Total	105	7948 <b>.37</b> 5			

<sup>\*\*</sup>Significant at or beyond the .01 level



Table 95

Analyses of Ninth Grade Title I 1969-70 Pre-test and Post-test
Data (Six Schools) on the Gates-MacGinitie Reading Tests
(Comprehension Subtest, Survey D)

	SCHOOL	PRE-TEST (01-19-70)			POST-TEST (05-11-70)			
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
208	l Nanakuli	21.90	5.99	20.10	9.87	-1.80	9	0.52
209	Waianae	31.38	9.78	31.04	10.35	-0.33	23	0.31
310	Waimanalo	20.00	12.00	16.67	1.15	-3.33	2	0.44
407	Waialua	33.20	9.78	32.60	14.45	-0.60	4	0.14
504	Kapaa	25.00	10.15	21.67	<b>6.</b> 66.	-3.33	2	1.17
710	Konawaena	34.81	9.96	35.32	11.45	0.51	73	0.70

 $<sup>^{1}</sup>$ Administered form E instead of D

Table 96

Analysis of Regression of Ninth Grade Title I 1969-70 Pre-test and Post-test Data (Six Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest, Survey D)

Source	df	Sum of Squares	Mean Square	F-ratio	
Regression	1	9810.844	9810.844	237.091**	
Residual	104	4303.531	41.380		
Total	105	14114,375			

<sup>\*\*</sup>Significant at or beyond the .01 level after correction for statistical regression



Table 97

Analyses of Tenth Grade Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Gates-MacGinitie Reading Tests
(Speed Subtest, Survey E)

	SCHOOL	PRE-TEST (01-17-70)		POST-TEST (05-11-70)				
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t_
407	Waialua	15.20	4.44	14.80	6.34	-0.40	4	0.27
701	Hilo	14.89	10.18	19.44	8.32	4.56	8	0.83
710	Konawaena	20.73	9.28	25.86	6 <b>.2</b> 8	5.14	43	3.66**

Table 98

Analysis of Regression of Tenth Grade Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Gates-MacGinitie Reading Tests (Speed Subtest, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	207.464	207.464	3.91
Residual	56	2963.106	52,913	
Total	57	3170.570		



Table 99

Analyses of Tenth Grade Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Gates-MacGinitie Reading Tests
(Accuracy Subtest, Survey E)

	SCHOOL	PRE-TEST (01-19-70)		POST-TEST (05-11-70)		Maria	df	
<del> </del>		Mean	SD	Mean	SD	Mean D <b>i</b> ff	(N-1)	t
40 <b>7</b>	Waialua	11.20	6.30	12.00	6 <b>.67</b>	0.80	4	0.87
701	Hilo	8.44	5.66	<b>14.7</b> 8	5.02	6.33	8	3.86**
710	Konawaena	14.82	7.47	18.30	6.82	3.48	43	3.84***

Table 100

Analysis of Regression of Tenth Grade Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Gates-MacGinitie Reading Tests (Accuracy Subtest, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	1205.287	1205.287	47.794**
Residual	56	1412.233	<b>25.21</b> 8	
Total	5 <b>7</b>	2617.520		



Table 101

Analyses of Tenth Grade Title I 1969-70 Pre-test and Post-test
Data (Four Schools) on the Gates-MacGinitie Reading
Tests (Vocabulary Subtest, Survey E)

	SCHOOL	PRE-TEST (01-19-70)			POST-TEST (05-11-70)		1.5	
		Mean	SD	Mean	SD	Mean D <b>i</b> ff	df (N-1)	t
305	Kahuku	10.70	3.16	14.50	3.24	3.80	9	2.51*
40 <b>7</b>	Waialua	15.60	4.28	16.60	8.44	1.00	4	0.27
<b>7</b> 01	Hilo	14.89	7.46	15.33	6.24	0.44	8	0.24
<b>71</b> 0	Konawaena	16.66	5.57	17.66	5.34	1.00	43	1.95*

Table 102

Analysis of Regression of Tenth Grade Title I 1969-70 Pre-test and Post-test Data (Four Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio	
Regression	1	989.521	989.521	63.113**	
Residual	56	877.998	15.679		
Total	57	1867.520			

\*Significant at the .05 level \*\*Significant at or beyond the .01 level



Table 103

Analyses of Tenth Grade Title I 1969-70 Pre-test and Post-test Data (Four Schools) on the Gates-MacGinitie Reading
Tests (Comprehension Subtest, Survey E)

	SCHOOL	PRE-TEST (01-19-70)		POST-TEST (05-11-70)				
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
305	Kahuku	17.10	2.51	17.80	2.82	0.70	9	1.02
40 <b>7</b>	Waialua	25.60	9.15	18.20	<b>7.</b> 92	<b>-7.</b> 40	4	2.22
701	Hilo	22.56	9.98	18.22	5 <b>.7</b> 4	-4.33	8	1.34
710	Konawaena	22.61	9.90	24.14	9.13	1.52	43	2.05*

Table 104

Analysis of Regression of Tenth Grade Title I 1969-70 Pre-test and Post-test Data (Four Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	2474.018	2474.018	69,411**
Residual	56	1996.001	35.643	
Total	5 <b>7</b>	4470.020		

<sup>\*</sup>Significant at the .05 level \*\*Significant at or beyond the .01 level



Table 105

Analyses of Eleventh Grade Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Gates-MacGinitie Reading Tests
(Speed Subtest, Survey E)

	SCHOOL	PRE-TEST (01-19-70)		POST-TEST (05-11-70)			<del></del>	
		Mean	SD_	Mean	SD	Mea <b>n</b> D <b>iff</b>	df (N-1)	t
209	Waianae	18.92	8.81	15.92	6.65	-3.00	12	1.61
701	Hilo	18.77	10.01	18.38	9.74	-0.38	12	0.1.7
<b>7</b> 10	Konawaena	20.75	10.19	25.50	8.38	4.75	7	1.67

Table 106

Analysis of Regression of Eleventh Grade Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Gates-MacGinitie Reading Tests (Speed Subtest, Survey E)

Source	d£	Sum of Squares	Mean Square	F-ratio
Regression	1	999.842	999.842	19.657**
Residual	32	1627.689	50.865	
Total	33	2627.531		



Table 107

Analyses of Eleventh Grade Title I 1969-70 Pre-test and Post-test
Data (Three Schools) on the Gates-MacGinitie Reading Tests
(Accuracy Subtest, Survey E)

SCHOOL		PRE-TEST (01-19-70)		POST-TEST (05-11-70)			1.5	
		Mean	SD	Mean	<b>S</b> D	Mean Diff	df (N-1)	t
209	Waianae	12.54	7.17	11.23	7.00	-1.31	12	1.58
701	Hilo	16.54	7.76	15.77	8.97	-0.77	12	0.41
710	Konawaena	15.25	7.55	20.00	8.32	4.75 <del>++</del>	7	2.32*

Table 108

Analysis of Regression of Eleventh Grade Title I 1969-70 Pre-test and Post-test Data (Three Schools) on the Gates-MacGinitie Reading Tests (Accuracy Subtest, Survey E)

Source	df Sum of Squares		Mean Square	F-ratio	
Regression	1	1358.910	1358.910	40.562	
Residual	32	1072.062	33.502**		
Total	33	2430.973			

\*Significant at the .05 level \*\*Significant at or beyond the .01 level



Analyses of Eleventh Grade Title I 1969-70 Pre-test and Post-test
Data (Four Schools) on the Gates-MacGinitie Reading Tests
(Vocabulary Subtest, Survey E)

S	CHOOL	PRE-TEST (01-19-70)			POST-TEST (05-11-70)			
· · · · · · · · · · · · · · · · · · ·		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
209	Waianae	17.08	4.09	16.54	4.96	-0.54	12	0.62
504	Караа	24.33	10.63	19.67	5 <b>.2</b> 8	<b>-4.</b> 67	5	0.99
701	Hilo	21.62	7.12	20.08	4.70	-1.54	12	1.05
710	Konawaena	19.88	5.57	21,00	5.76	1,13	7	1.39

Table 110

Analysis of Regression of Eleventh Grade Title E 1969-70 Pre-test and Post-test Data (Four Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	521.948	5 <b>21.</b> 948	42.185**
Residual	32	395.935	<b>12.37</b> 3	
Total .	33	917.883		



Table 111

Analyses of Eleventh Grade Title I 1969-70 Pre-test and Post-test:
Data (Four Schools) on the Gates-MacGinitie Reading Tests
(Comprehension Subtest, Survey E)

	SCHOOL	PRE-TEST (01-19-70)		POST-TES?. (05-11-70)				
<del></del>		Mean	SD	Mean	SD	Mean D <b>i</b> ff	df (N-1)	t
209	Waianae	25,69	9,24	24.92	6.46	-0.77	12	0.36
504	Kapaa	34.83	14,82	22.50	16.51	-12.33	5	2.34
701	Hilo	32.92	10.80	29.85	12.31	-3.08	12	1.31
<b>71</b> 0	Konawaena	28.00	10.25	29,25	9.68	1.25	7	0.89

Table 112

Analysis of Regression of Eleventh Grade Title I 1969-70 Pre-test and Post-test Data (Four Schools) on the Gates-MacGinitie Reading Tests (Comprehsion Subtest, Surrey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	1711.931	1711.931	37.964**
Residual	32	1443.010	45.094	
Total	33	3154.941		

Table 113

Analyses of Twelth Grade Title I 1969-70 Pre-test and Post-test
Data (Cao Schools) on the Gates-MacGinitie Reading Tests
(Speed Subtest, Survey E)

SCHOOL	PRE-'f (01-19		POST~ (05-1	TES: 1-70)		1.0	
	Mean	SD	Mean	SD	Mean Diff	df (N-1)	t_
701 Hilo	16.00	7.24	20.80	8.34	4.80	9	2.38*

Table 114

Analysis of Regression of Twelfth Grade Title I1969-70 Pre-test and Post-test Data (One School) on the Gates-MacGinitie Reading Tests (Speed Subset, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	282.256	282,256	6.577*
Res <b>i</b> dual	3	343 <b>.3</b> 45	42.918	
Total	9	625.602		

\*Significant at the .05 level



Table 115

Analyses of Twelfth Grade Title I 1969-70 Pre-test and Post-test
Data (One School) on the Gates-MacGinitie Reading Tests
(Accuracy Subtest, Survey E)

SCHOOL		PRE-TEST POST-TEST (01-19-70) (05-11-70)					• • • • • • • • • • • • • • • • • • • •
	Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
701 Hilo	13.80	6.30	16.40	6.17	2.60	9	1.63

Table 116

Analysis of Regression of Twelfth Grade Title I 1969-70 Pre-test and Post-test Data (One School) on the Gates-MacGinitie Reading Tests (Accuracy Subtest, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	154,170	154.170	6.5 <b>52</b> *
Residual	3	188.231	<b>23.52</b> 9	
Total	9	342,400		

\*Significant at the .05 level



Table 117

Analyses of Twelfth Grade Title I 1969-70 Pre-test and Post-test
Data (Two Schools) on the Gates-MacGinitie Reading Tests
(Vocabulary Subtest, Survey E)

SCH	00L	PRE-T (01-19			POST-TEST (05-11-70)		N de		
		Mean	SD	Mean	SD	Mean D <b>i</b> ff	df (N-1)	t	
504	Kapaa	16.50	6.09	18,33	7.76	1.83	5	1.13	
701	Hilo	22.00	9.88	21.70	10.34	-0.30	9	0.18	

Table 118

Analysis of Regression of Twelfth Grade Title I 1969-70 Pre-test and Post-test Data (Two Schools) on the Gates-MacGinitie Reading Tests (Vocabulary Subtest, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	718.036	718.036	23.536**
Residual	8	244.065	30,508	
Total	9	962.102		



Analyses of Twelfth Grade Title I 1969-70 Pre-test and Post-tost
Data (Two Schools) on the Gates-MacGinitie Reading Tests
(Comprehension Subtest, Survey E)

SC	HOOL	PKE-T (01-19		POST- (05-1	df			
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
504	Караа	33.33	11.93	29.67	14.95	-3.67	5	0.76
701	Hilo	31.00	13.14	30.80	12.16	-0.20	9	0.10

Table 120

Analysis of Regression of Twelfth Grade Title I 1969-70 Pre-test and Post-test Data (Two Schools) on the Gates-MacGinitie Reading Tests (Comprehension Subtest, Survey E)

Source	df	Sum of Squares	Mean Square	F-ratio
Regression	1	1003.861	1003.861	24.504**
esidual	8	327.740	40.968	
Cotal	9	1331.602		



Table 121

Analyses of Title I 1969-70 Pre-test and Post-test Data (by School within Grade) on the Stanford Achievement Test

(Arithmetic Computation Subtest)

		SCHOOL	PRE-T		POST-				
			(01-19	9-70)	(05-1	11-70)	Mean	d£	
G <u>vade</u>			Mean	SD	Mean	SD	Diff	(N-1	l) t
2	708	Keaukaha	29.80	14.20	32.70	13.70	2.90	9	2.64
2	302	Hauula	31.41	7.75	31.18	7.56	-0.24	16	0.22
3	708	Keaukaha	38.25	4.79	38,00	9.93	-0.25	3	0.08
4	302	Hauula	20.36	9.15	24.00	10.29	3.64	10	2.44*
4	708	Keaukaha	33,73	11.80	42,45	10,16	8.73	10	2.14
5	302	Hauula	24.83	7.48	23.92	11.63	-0.92	11	0.46
5	708	Keaukaha	38.56	12.46	45.33	11.24	6.78	8	2.43
6	708	Keaukaha	18.00	6.65	20.11	8,70	2.11	8	1.22
8	710	Konawaena	13.80	2.77	15.20	4.44	1.40	4	0.61
9	710	Konawaena	17.82	6.79	18.76	6.94	0.94	71	2.01*
10	710	Konawaena	12.00	5.53	13.48	5.96	1.48	43	2.95*
11	710	Konawaena	10.63	4.00	12.13	4.42	1.50	7	2.29*

\*Significant at the .05 level

Table 122 Analyses of Title I 1969-70 Pre-test and Post-test Data (12 Schools) on the School Attitude Inventory (4-month interval)

	SCHOOL	PRE-TE	ST	POST-T	EST			
		Mid-Nov.	1969	<u>Mid-March</u>	1970			
						Mean	df	
	_ <del></del>	<u>Mean</u>	SD	Mean	SD	Diff	(N-1)	t
123	McKinley Hi	109.66	23.16	116.28	22.79	6.63	31	2.17%
704	Honaunau School	124.91	15.51	128.53	17.78	3.62	33	1.30
701	Hilo Hi	118.03	22.22	119.22	24.23	1.19	36	0.4%
207	Waianae Inter.	120.66	27.99	120.64	28.33	-0.02	49	0.01
1.17	Dole Inter.	133.02	25.20	131.65	24.10	-1.37	85	0.71
122	Kaimuki Hi	115.06	21.57	113.09	24.19	-1.97	108	1.0
121	Farrington Hi	122.93	21.87	120.82	22.51	-2.11	97	1.20
118	Jarrett Inter.	126.53	17.95	123.75	20.44	-2.78	72	1.56
706	Kapiolani Elem.	134.91	22.80	131.95	22.29	-2.97	57	1.35
120	Washington Inter.	116.74	23.00	110.61	32.73	-6.13	22	1.46
119	Kalakaua Inter.	120.31	18.87	111.00	17.94	-9.31	41	2.99***
406	Aiea Inter.	143.71	17.77	130.00	26.93	-13.71	6	1.50



<sup>\*</sup>Significant at the .05 level \*\*Significant at or beyond the .01 level

**Table 123** Analyses of Title I 1969-70 Pre-test and Post-test Data (14 Schools) on the School Attitude Inventory (5-month interval)

	SCHOOL	PRE-TI		POST-T				
		Mean	SD	Mean	SD	Mean Diff	df (N-1)	t
506	Kalaheo School	100.14	26.80	136.24	24.32	36.10	20	7.22
116	Central Inter.	120.66	25.56	123.20	26.92	2.54	34	0.73
304	Kahaluu School	125.30	17.38	127.74	16.03	2.43	22	0.85
703	Holualoa Elem.	128.08	24.54	129.82	23.37	1.74	38	0.75
120	Washington Inter.	119.78	21.05	121.09	23.70	1.30	2 <b>2</b>	0.36
404	Wahiawa School	114.00	39.00	113.50	33.83	-0.50	3	0.04
303	Kaaawa Elem.	130.48	20.23	128.96	19.13	-1.52	22	0.40
308	Waiahole Elem. & Inter.	131.74	21.94	128.79	26.67	<b>-2.</b> 95	18	0.50
710	Konawaena Hi & Inter.	120.30	24.58	113.45	27.70	-6.86	138	3.74**
406	Aiea Inter.	114.38	23.07	107.38	27.14	-7.00	12	0.90
209	Waianae Hi	117.45	24.15	110.03	24.53	-7.42	32	1.32
306	Laie School	147.05	13.58	138.05	16.55	-9.00	20	2.78
407	Waialua Hi	111.80	25.91	101.07	13.88	-10.73	14	1.89
302	Hauula School	145.20	21.38	124.25	<b>24.7</b> 9	-20.95	19	2.66**

<sup>\*</sup>Significant the the .05 level
\*\*Significant at or beyond the .01 level